

# American Artisan *and* Hardware Record

Sheet Metal—Roofing—Warm Air Furnaces—Stoves

Vol. 92, No. 20

CHICAGO, NOVEMBER 13, 1926

\$2.00 Per Year

## THE SUPER-SMOKELESS MEANS LARGER PROFITS



Cut-away View of  
SUPER-SMOKELESS FURNACE

THE SUPER-SMOKELESS Furnace is the best investment a home owner can make. It burns the smoke as valuable fuel, obtaining full heat value from the coal. This means a large saving in annual heating costs. It has proved to be a big fuel saver burning hard coal, as well as soft coal. The addition of oxygen at the right place and temperature ignites the gases distilled from the fuel, and, even with hard coal, generates more heat from less fuel.

We are now telling the public the big story of clean, efficient and highly economical home heating through the medium of The Saturday Evening Post. The result of this advertising is sure to be a nation-wide demand for this high-grade heating plant which radically cuts fuel costs. There is a big opportunity for the dealer who cashes in on this demand and on the merits of the SUPER-SMOKELESS Furnace.

The SUPER-SMOKELESS Furnace will mean dollars in your pocket. The dealer who sells them is in a distinct class—actually above competition. He can increase his business and get better prices. Write for full information TODAY.

## UTICA HEATER COMPANY

*"Pioneers in Smokeless Combustion"*

UTICA, N. Y.—CHICAGO, ILL.



## Are You Just One of Their "Customers" for Furnaces?

Some furnace manufacturers regard their dealers as furnace customers. They consider their work done when they have sold their furnaces to the dealer. With the L. J. Mueller Furnace Co., this is but the beginning. This organization believes that selling—or helping to sell—furnaces for their dealers is part of their job.

If you are simply a customer for furnaces, then you yourself are doing all the work of selling and planning installations. You are playing a lone hand to dispose of goods the manufacturer has sold you. Your profit is reduced by excessive selling expense.

If you are a Mueller franchise dealer, you get valuable advertising, selling and engineering help from the factory. This makes both selling and installation work easier and more profitable. Time to be thinking about these things **now**.

Make next year pay you a better profit. Be a Mueller dealer!

**L. J. MUELLER FURNACE CO.**

193 Reed St.

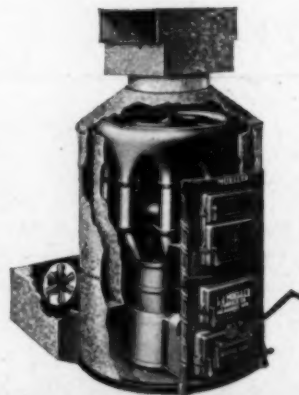
Milwaukee, Wis.

Established 1857

Makers of Warm Air Furnaces, Steam and Hot Water Boilers, Tank Heaters and Garbage Burners, etc.

Warehouses: Boston, Baltimore, Detroit, St. Louis, St. Paul, Minneapolis, Ft. Collins, Colo., Salt Lake City, Seattle

**Mueller Double Radiator Furnace** — a self-cleaning, warm air furnace with more direct heating surface than any other furnace of equal grate area.



**Mueller Direct-Fired Forced-Air Unit** for heating public garages, factories, foundries, warehouses, schools, churches, stores, and large residences requiring forced-air "fan circulation"—requires no radiation. Uses hard or soft coal, coke, gas or oil burner.

# MUELLER FURNACES

TONS OF COAL CHEAPER  
easier to sell than to sell against

# THE SECURITY

Pipe and Pipeless  
WARM AIR FURNACE



**T**HIS wonderful line of furnaces is manufactured in one of the largest foundries west of the Mississippi river.

Made from entirely new patterns that are mounted for the very latest improvements in foundry equipment.

LOW MANUFACTURING COST enables us to ship over the entire country. Carload orders especially desired.

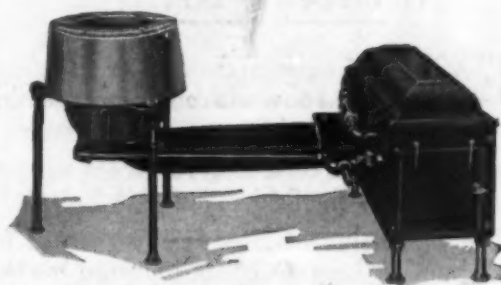
**4 SIZES NOW READY**

*Ask for Circular giving ratings based on—*

**STANDARD CODE SERVICE**

# THE SECURITY

AUTOMATIC  
OIL BURNER

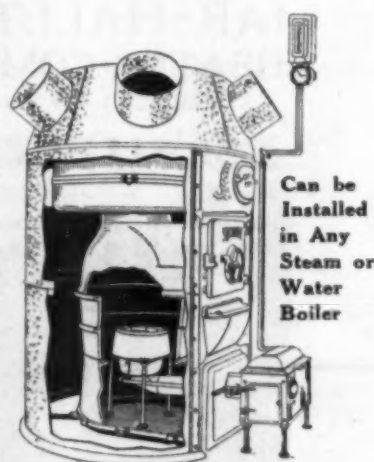


**K**ANSAS CITY was the first large city to adopt the domestic oil burner for home heating. More installations have been made here than in any other city. Our company has been manufacturing them in large quantities for twenty years.

The Security Burner eliminates service calls. All parts of the combustion chamber are practically indestructible, but can be quickly renewed if necessary at a cost of less than \$10.00. The fire brick walls are guaranteed for five years.

The control mechanism is enclosed in a cast iron case, finished in baked-on Japan. The burner is provided with a positive gas ignition consisting of four Bunsen pilot flames, so located and protected that oil vapor does not carbonize the tips. An oil pilot can be used if desired.

The Security Burner can be operated as a natural draft burner in case the electric current is interrupted.



Ask for Books  
Entitled  
The  
Advantage of  
Burning Oil  
and  
Testimony of  
Users

**AGENTS WANTED**

**SECURITY STOVE & MANUFACTURING CO.**  
KANSAS CITY, MO.



THE  
**MARSHALLTOWN**  
LINE

*The Time Will Come  
When You Will Sell  
a Steel Furnace*

**E**ACH year more and more steel furnaces are sold and now with oil burning gaining steadily a good steel furnace is a necessity.

Before you take on a steel furnace it will pay you to study the field.

The Marshalltown is especially adapted for oil burning because of its immense heating surface, heavy steel construction and superior extra thick fire brick lining.

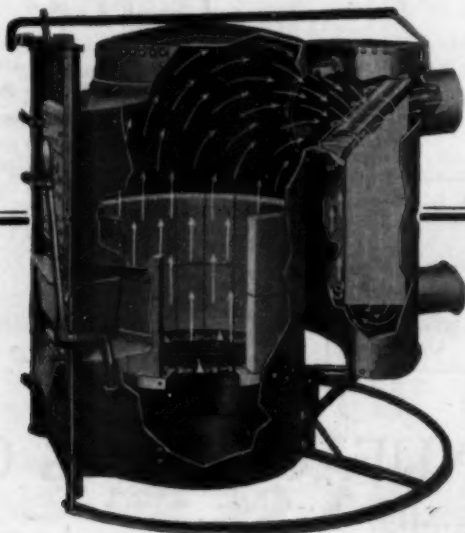
Other points of construction that make it a powerful, efficient and economical heater are found in the following features.

Large three flue crescent radiator, large capacity firepot, an extra large waterpan, efficient air blast and positive working gravity direct draft damper. Convenient lever shaker handle adds to convenience.

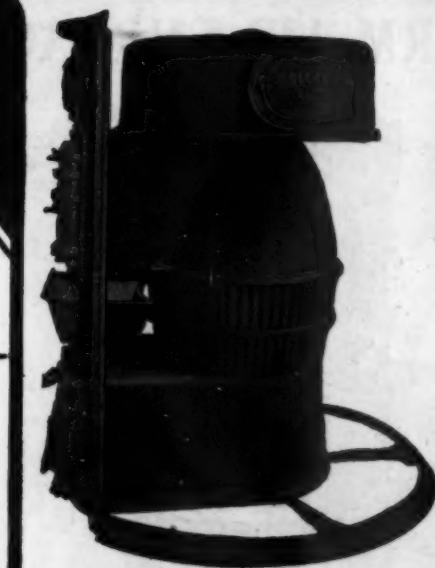
We help good dealers sell the Marshalltown—real sales help and expert engineering service are a part of the Marshalltown Agency.

*Let us tell you about the margin of profit that the Marshalltown gives you. Write today for prices and catalog.*

**MARSHALLTOWN**  
**HEATER COMPANY**  
MARSHALLTOWN, IOWA



**NIAGARA**  
**FURNACES**



**Friendly Customers**

Every dealer wants to make friends of his customers, to have them not only satisfied, but enthused about their purchases.

And we wish to make friends of our dealers, to have them enthusiastic about the product they are handling.

**NIAGARA FURNACES**

**Give This Double Relationship**

They make Friends with the customer because of their long life, their abundant heating service and the ease with which they operate.

NIAGARA FURNACES make friends with the dealer because of their easy sale and the splendid cooperation given by us to our Dealers.

*Write or wire us for details*

**The Forest City Foundry  
and Manufacturing Co.**

1220 Main Avenue

Cleveland, Ohio

Also Manufacturers of Monarch Furnaces

*Say you saw it in AMERICAN ARTISAN—Thank you!*



**C**HECK UP on the things you want and *must have* in a furnace if you expect to sell on a quality basis and at a price that will produce sales and see if you don't choose the popular

# Vernois



**Y**OU will find the features, quality and price that your customers want and you'll also find the cooperation and service from us that you want.

*Write today for our complete catalog and attractive prices.*

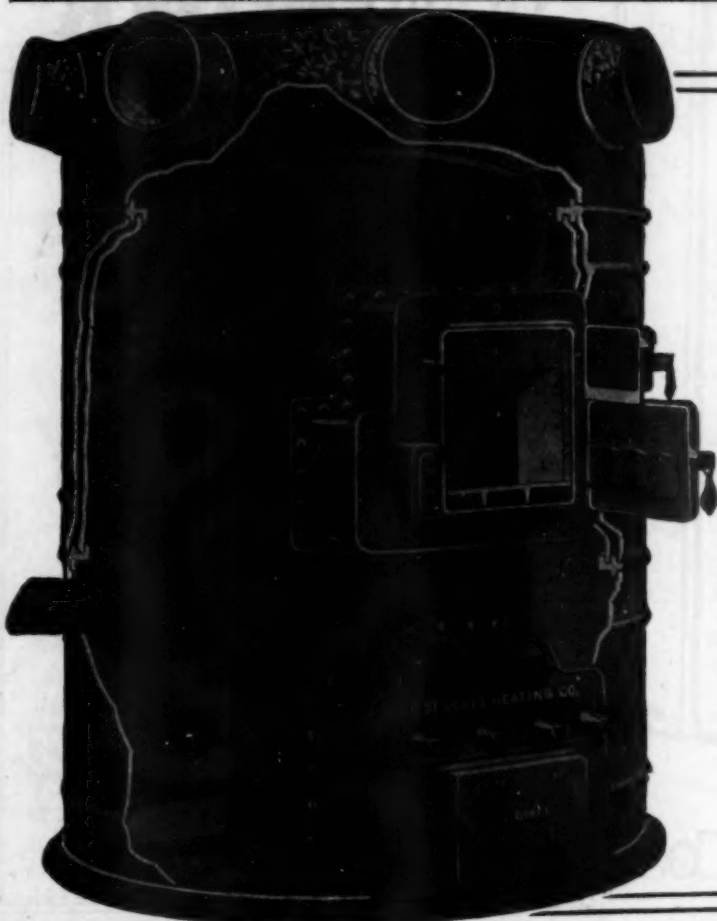
#### DISTRIBUTORS

Central Heating Supply Co.  
1123-29 W. 37th Street, Chicago, Ill.  
J. M. Ralley,  
3388 S. Broadway, Denver, Colo.  
Stove Dealers Supply Co.,  
310 Chestnut Street, Milwaukee, Wis.  
Allen Furnace Co.,  
115 S. 14th Street, St. Louis, Mo.

A. M. Miller,  
3887 W. 21st St., Cleveland, Ohio  
L. C. Manley,  
1305 West Avenue, Medina, N. Y.  
Munroe & Son Furnace & Supply Co.  
1718 Cass Street, Omaha, Neb.  
The Kober Company,  
5th & K Sts., N. W., Washington, D. C.

**Traveling Salesmen:**—We have several good territories still open

**Mount Vernon Furnace & Mfg. Co.**  
Mt. Vernon, Illinois



**Only real quality  
can make real  
profits for you—**

**A**ND when you decide to sell steel furnaces, which you will some day, remember that the construction of the furnaces illustrated here has the features of construction that have made

## "HOME COMFORT" Steel Furnaces

**famous favorites for over half century**

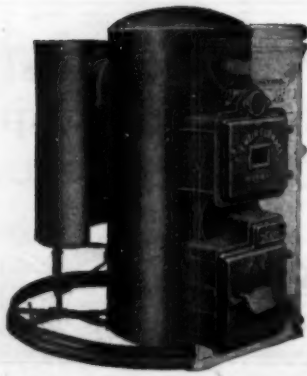
True their construction has changed with time, but only when real quality features could be added. Recent improvements on Home Comfort furnaces have increased their heating surfaces and made them more efficient and economical consumers of fuel. (Notice the gas and soot consuming features shown on the feed door.)

We have a special circular called "A Dozen Appeals to Reason" which points out some of the "Home Comfort" features. Write for it today.

**ST. LOUIS HEATING CO.**  
2901-11 Elliot Ave., St. Louis, Mo.

PITTSBURGH DISTRIBUTOR  
Wagner Bros., 4005 East Street

Mention AMERICAN ARTISAN in your reply—Thank you!



## Weir Steel Furnace

**I**N another month or so you will be thinking seriously about your 1927 furnace business.

You have always promised yourself that *next time* you were going to get the facts about the Weir and study them thoroly.

Let this be a reminder—drop us a note now—just tell us you want to know all about the Weir.

The superiority of the Weir is easy to see—its features so distinctive that you'll find it a pleasure to read about it.

And you will see why it is so easy to tell your prospects about Weir construction and why these convincing facts make Weir dealers enthusiastic and prosperous.

There is no obligation in asking us to send a Weir representative to talk with you—we will be glad to—only do it now—

*or just write today for  
your copy of the  
"Book of Weir Facts"*



**The MEYER FURNACE Co.**  
Peoria, Illinois

for---

Rush Service  
on

**TIN PLATE**  
for

Warm Air Heater  
Pipe and Fittings

**SEND  
YOUR  
ORDER  
TO  
DAVIS**

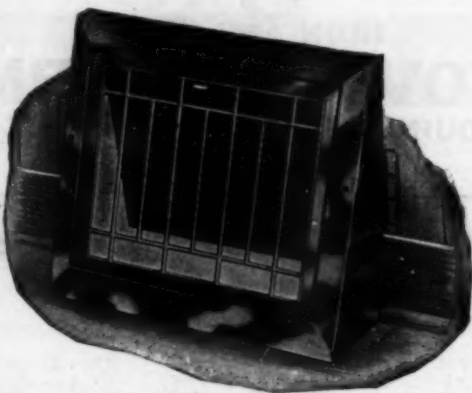
*Large  
Complete Stocks  
of  
Diversified Sizes*

**TIN PLATE**  
C. S. DAVIS AND COMPANY, INC.  
37TH ST AND IRON ST CHICAGO, ILLINOIS.  
**TIN PLATE**

*Warehouses at CHICAGO PITTSBURG-NEW YORK.*

eventually you  
will use a **Kruse**  
oil burning furnace

KRUSE CO.  
INDIANAPOLIS



**Yes, we admit**

*it's Attractive  
it's Efficient  
it's Economical  
it's the Vol-Yum register*

**for volume Furnacework  
for volume Profits.**

*Mail coupon today for interesting prices and information.*

**Rock Island Register Co.,  
Rock Island, Ill.**

**YOU** may send your interesting prices and information on Vol-Yum registers.

Name .....  
Street No. ....  
City and State.....

# QUAKER

## Steel Furnaces

OIL BURNING  
COAL BURNING



*This specially constructed QUAKER  
OIL BURNING FURNACE  
AND QUAKER OIL BURNER  
solves that problem for you-----*

**NOW** with this COMBINED and SPECIALLY DESIGN-  
ED QUAKER STEEL OIL BURNING FURNACE  
and QUAKER OIL BURNER you can sell guaranteed warm  
air heating at a price that is less than the cost of a good  
mechanical oil burner alone.

Notice from the above illustration that this is a COMPLETE  
heating unit—not merely an oil burner attached.

We want to tell all about this NEW and SUCCESSFUL  
idea that is making money for hundreds of dealers NOW.  
Write today.

**QUAKER MFG. CO.**

215A N. Michigan Ave.  
Chicago, Illinois

**QUAKER  
MFG. CO.,  
215A N. Mich. Ave.  
Chicago, Ill.**

Send this  
coupon  
today

Send literature and dealer proposition  
on ☐ coal ☐ oil furnaces.

Name .....  
Address .....  
City ..... State.....

**MANUFACTURERS OF STEEL FURNACES FOR 30 YEARS**



**NOW.** WITH winter not far off why not make a display of this *new, practical and most efficient* warm air furnace air moistener and get your share of the big, easy profits that hundreds of live dealers are making.

There isn't another air moistener like this on the market—it's the only one that really solves the proper humidity question.

Write for dealer prices today

For  
Easy  
Sales  
and  
Profits



Write  
today  
for  
complete  
details

IT slides in over radiator—fits any style or make of furnace—has only a few simple parts and is absolutely fool-proof. It is entirely automatic—connects directly to city water—cannot overflow.

The New  
Improved  
**NATIONAL**  
Air Moistener



ROBINSON FURNACE CO., 205 W. Lake St., CHICAGO, ILLINOIS

**BOLTS**

WE MANUFACTURE A COMPLETE LINE OF BOLT PRODUCTS, INCLUDING STOVE BOLTS, CARRIAGE BOLTS, MACHINE BOLTS, LAG BOLTS, NUTS, COTTER PINS, ETC. ALSO STOVE RODS, SMALL RIVETS AND HINGE PINS, CATALOG ON REQUEST.

**THE KIRK-LATTY CO.**  
1971 W. 85th St. Cleveland, O.

**CLEAN FURNACES BY VACUUM**

FURNACEMEN—Clean furnaces by vacuum. It's quicker, cleaner and more convenient. The Sturtevant Furnace Cleaner cleans thoroughly, cuts cleaning time in half, and gives furnacemen an opportunity to handle more business. It's portable, comes completely equipped with brushes, scrapers, etc. Hundreds of satisfied users. Write TODAY for catalog and information.



Hyde Park,  
Boston, Mass.

**PATTERNS**

FOR STOVES AND HEATERS

VEDDER PATTERN WORKS

FIRST-CLASS  
IN WOOD and IRON  
ESTABLISHED 1835

TROY, N. Y.

**PATTERNS FOR STOVES AND HEATERS**

THE CLEVELAND CASTINGS PATTERN COMPANY  
CLEVELAND, OHIO

**IRON AND WOOD  
STOVE PATTERNS**  
QUINCY PATTERN COMPANY  
QUINCY, ILLINOIS

**Books**

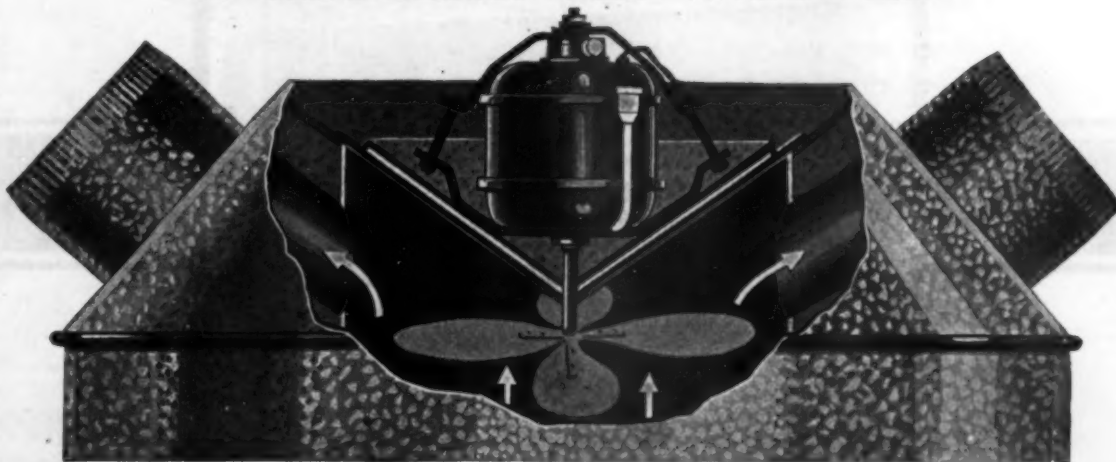
We can supply you with any book published for the Sheet Metal Worker, Warm Air Heater Installer or Automobile Radiator Repairer.

Tell Us  
to send you a copy of our  
10 page book catalog

**AMERICAN ARTISAN  
AND  
HARDWARE RECORD**

620 South Michigan Ave.  
Chicago, Ill.

## A REGULAR GEE-WHIZZER



## THE ROBINSON HEAT DISTRIBUTOR SOLVES THE LONG PIPE PROBLEM

This Fan will insure Uniform Temperature in every room in the house—and do it economically. Can be installed in any make of Furnace.

WRITE TODAY FOR DESCRIPTIVE CIRCULAR AND PRICES

5103 DETROIT AVE.

**THE A. H. ROBINSON CO.**

CLEVELAND, OHIO

## "FABRIKATED" REGISTER FACES

For Cold Air Inlets—For Warm Air Outlets

Any Size—Any Finish



NO BREAKAGE

A METAL FACE AT A PRICE YOU CAN AFFORD TO PAY  
Every furnace man should know about "Fabrikated." Do you?

INDEPENDENT REGISTER & MFG. CO.  
3741 E. 93d ST., CLEVELAND, O.

**82%  
Open  
Area**

Healthful

Heating

WATER drips automatically and humidity is indicated and regulated. Water feed attaches to city water.

Highly efficient—  
fool proof—  
economical.



DESIGNED to fit all standard makes of furnaces—easily installed—sets on top of furnace. Simple in design—durable, constructed of cast iron, galvanized.

The only Humidifier on the market having a Patented Hygrometer and sight feed regulating automatic water supply.

Write today for illustrated circular telling all about the HUMIDAIR and its many other features that make it a quick profit maker. Fully guaranteed on money back basis.

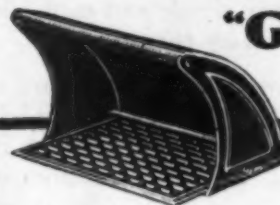
**J. ROEMER HEATING CO.**  
THE BUILDERS' EXCHANGE CLEVELAND, OHIO

**Write**  
For Our  
Illustrated  
Book of  
Order Blanks

You'll find this book handy. It explains how and simplifies ordering Stove, Furnace and Boiler repairs from the—

Largest and Most Complete Stock

**NORTHWESTERN**  
STOVE REPAIR CO., CHICAGO



## "GEM" ADJUSTABLE REGISTER SHIELDS

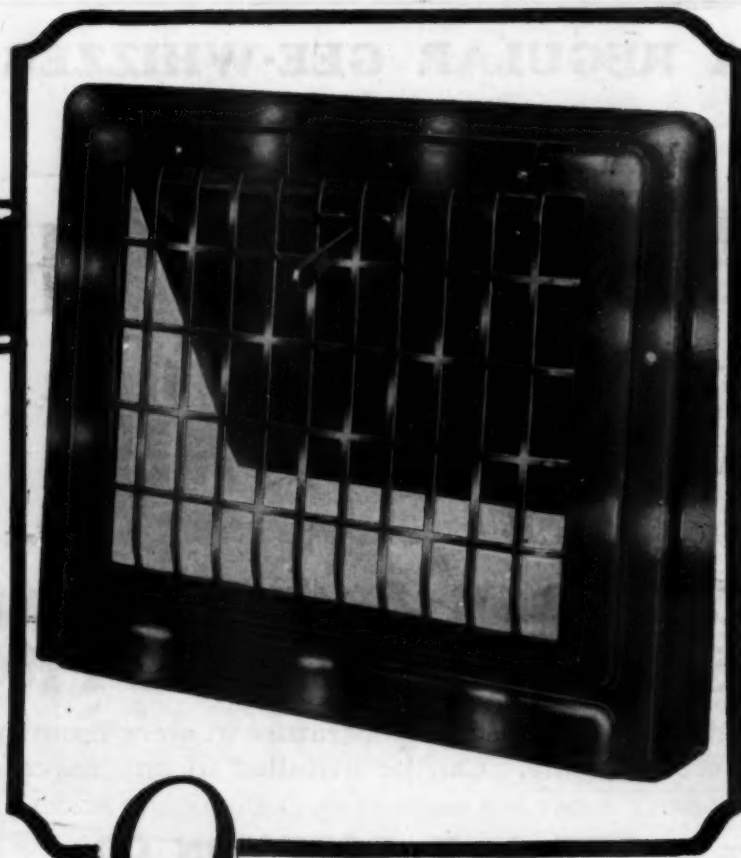
It's easy to interest neat, thrifty housewives in "Gem" Shields, as they protect walls and ceilings. Attractive and easily adjustable. Fit all size registers. Floor Shield retails at \$1.50; Wall Shield at 75c.



1140 BROADWAY, NEW YORK, N.Y.

**BUY FROM YOUR JOBBER**

When writing mention AMERICAN ARTISAN—Thank you!



*Send  
for a  
Sample!*

## *One Hundred Per Cent Free Air Capacity without loss of strength or attractiveness*

**Y**OU never saw a finer piece of Register work—a better balanced job of designing than that found in this register.

This improved model while having the enlarged openings to allow 100% Free Air Capacity, is nevertheless strong and exceptionally neat in appearance.

### **The Improved STEARNS REGISTER**

is the only register made that possesses an operating device that does not rely on springs or tension to be effective. The operating device on the STEARNS REGISTER is very simple and most effective. It is exclusive with the STEARNS and is fully covered by patents.

The Register comes in all the standard sizes and finishes. STEARNS finishes are of the highest quality. All the regular electro-plated finishes can be had and also the popular lacquer finishes such as Brush Brass, Antique Brass and a perfect replica of Oxidized Copper. All lacquer finishes sell on same list price as White Japan.

Our new factory has increased our production facilities. Let us tell you how our selling plan saves you money.

*Write today for catalog and prices*

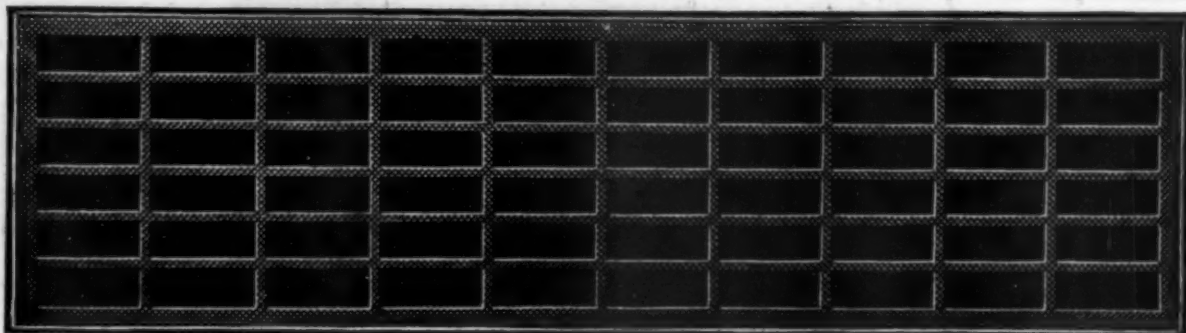
**STEARNS REGISTER COMPANY**

1234 Mt. Elliott Ave.

Detroit, Mich.



# Cold Facts On T&B STYLE "C" COBBLE Cold Air Face



- One . . .** The design permits the largest free air opening consistent with strength, safety and appearance.
- Two . . .** Being of cast iron it has the desirable depth to the cross barrings so obviously missing in stamped steel faces.
- Three . .** The rolled edge and narrow rim assure a snug, even, easy setting without recessing.
- Four . . .** The finish—Tanbo Antique—harmonizes well with all color schemes, therefore is suitable for any room.
- Five . . .** Wear comes only on the "Tips" of the cobbles—the finish lasts indefinitely.
- Six . . .** As this style face is not attached in any way, it is easily removed to allow a complete cleaning of the cold air box.
- Seven . .** The advantages of T. & B. Style "C" Cobble Cold Air Face are apparent.



**Style 80 Cobble Register**

Style 80 Cobble Register is a worthy companion piece for Style "C" Cobble Cold Air Face. This register embodies the same characteristics of design that place Style "C" Cobble in a class by itself. Furthermore the miniature cobbles prevent the foot from slipping and provide extra radiating surface—keeping the register from becoming overheated.

*The coupon below will bring you full information regarding these products*

**TUTTLE & BAILEY MFG CO.**  
*Makers of Registers and Grilles for 80 Years*

**441 LEXINGTON AVENUE  
NEW YORK CITY**

36 Portland St., Boston  
704 East 18th St., Kansas City

1123-29 W. 37th St., Chicago  
Bridgeburg, Ontario, Canada

**TUTTLE & BAILEY MFG. CO. A.A.**  
441 Lexington Ave., New York City

Gentlemen:

Kindly send full information regarding  
Tuttle & Bailey Style "C" Cobble Cold Air  
Face—also Style 80 Cobble Register.

Name.....

Address.....

Mention **AMERICAN ARTISAN** in your reply—Thank you!

Published to serve  
the  
Warm Air Furnace,  
Sheet Metal, Roofing  
Stove and Hardware  
Industries

Founded 1880

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\$2.00 Per Year.

## Table of Contents

	Page		Page
Sheet Metal Department.....	67 to 79	Furnace Dealers Will Hear Prof. U. S. Day at Rock Island .....	79
Sheet Metal Holds 5,400 Lights in Place on Granada Theater Sign, Chicago.....	67	Notes and Queries.....	79
Sheet Metal Men in Cincinnati and Vicinity Enjoy Dinner at Joint Meeting.....	68	Random Notes and Sketches, by Sidney Arnold	80
Snow Fence Opens New Market for Sheet Metal .....	69	Editorial Page.....	81
Tentative Draft of Lien Law Out on Approval	71	Heating and Ventilating Department... ..	82 to 85
Statistics on Overhead Aid Contractor in Future Computations.....	71	Furnace Installers Can Profit by Use of Local Newspapers .....	82
Showing Langley How to Construct Cold Air Casing Shoe.....	72	Excelsior Holds Annual Sales Conference at Chicago .....	82
Carpenter's Lack of Vision Makes Work for Sheet Metal Man.....	74	Manufacturer Co-operates with Dealer in Building Good Will.....	83
Sheet Metal Serving Chicago's New Union Station Extensively .....	77	Hardware Department .....	86 to 90
Illinois Sheet Metal Contractors and Auxiliary Officers Hold Directors' Meeting—Set Con- vention Dates .....	78	Logan & Whaley Stage Effective Hardware Booth at County Fair.....	86
		Why Hardware Wholesaler Must Increase His Gross Profits .....	88
		Coming Conventions .....	90
		Markets .....	92

### AN ACHIEVEMENT

*An explanatory note regarding service to readers of AMERICAN ARTISAN. This paper is now nearing the completion of a half century of service. For almost fifty years it has catered to the needs of the men in the industries which it represents. At no time during its long and successful career has AMERICAN ARTISAN been in a better position to render complete, adequate service to its readers than it is today. In addition to the matter contained in our regular weekly publication, we maintain Service Departments for the use of our readers. If you have a problem to solve, we courteously invite you to submit it to us for solution. In what better way can we learn of your problems than from you direct?*



ONE PIECE CAST IRON RADIATOR



ANTI-CLINKER GRATES



SPECIAL THATCHER REGISTER



# THATCHER PIPELESS FURNACE

## Special Features

**S**HOW your customer the many special features of the Thatcher Pipeless Warm Air Furnace and explain how the warmed air rises through the center of the register, and returns when cooled down the side air-passage to be moistened, purified and re-heated.

Tell him that the Thatcher Warm Air Pipeless Furnace has been heating homes comfortably for 76 years. It will make money for you and save money for your customer. It is a furnace **easy to install**—no piping and only one register—the most successful and popular type of heating plant for small houses of any kind.

### Other construction details are:

- |                                       |                                |
|---------------------------------------|--------------------------------|
| 1. Deep corrugated fire-pot           | 4. Double feed door            |
| 2. Large combustion chamber           | 5. Large vapor pan             |
| 3. Easily operating triangular grates | 6. One piece steel casing ring |
|                                       | 7. Extra heavy castings        |

Write for full information regarding Thatcher products.

### THE THATCHER COMPANY

formerly Thatcher Furnace Co.

Since 1850

Chicago  
341 N. Clark St.

NEWARK, N. J.  
39-41 St. Francis St.

New York  
21 West 44th St.

# THATCHER

BOILERS-FURNACES-RANGES



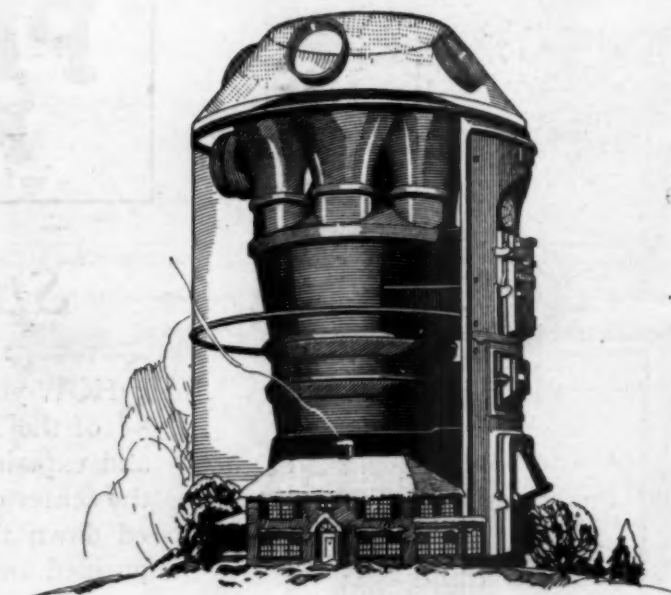
# sell your customer a quality furnace!

**S**ELL him an **INTERNATIONAL** Self Cleaning Carton Furnace. Tell him that the Self Cleaning Carton lasts from 30 to 65 years and he will understand why we call the Self Cleaning Carton "A furnace for homes that endure."

Its efficiency and durability make the **INTERNATIONAL** Self Cleaning Carton a furnace suitable for finer homes,—built for future generations,—as well as for the present.

Scientifically correct design and enduring construction are the reasons why Self Cleaning Cartons installed 40, 50, even 65 years ago are still serving efficiently.

Insure your adequate profits by installing Self Cleaning Carton Furnaces. They enable you to construct real heating systems in any home at a price that will bring you more than the usual return for your work. Establishing yourself as an installer of Self Cleaning Carton Furnaces, according to the Standard Code, will distinguish you in your community as a dealer in quality heating systems and create favorable reception for your work wherever you solicit business.



SELF CLEANING CARTON WARM AIR FURNACE

## Customers Appreciate These Features:

*Ashpit cast without a joint. No dust leaks.  
Herringbone triangular grates mean a cleaner fire.*

*Firepot in two sections with deep cup joint.  
Will not crack.*

*Feed chute cast without a joint. No gas leaks.*

*Combustion dome, or mixing chamber, that insures correct combustion.*

*And a double casing complete this International Carton, the warm air furnace for finer homes.*

*Installed according to the Standard Code, this heating system will give a lifetime of satisfaction.*

*Dealers and heating engineers send for catalog 1818-A, describing the Self Cleaning Carton in detail.*

### SERVICE

Service counts during the busy season. We will ship promptly from Utica factory and branches warm air equipment of the proper size and type for any requirement.

# INTERNATIONAL HEATER UTICA, N. Y. COMPANY

NEW YORK CHICAGO CLEVELAND PHILADELPHIA DETROIT NASHUA, N. H.

Mention **AMERICAN ARTISAN** in your reply—Thank you!



# American Artisan and Hardware Record



Vol. 92.

CHICAGO, NOVEMBER 13, 1926

No. 20.



Canopy Over Entrance of New Granada Theatre, Devon Avenue and Sheridan Road, Chicago, Carrying Huge Sheet Metal Sign.

## Sheet Metal Holds 5,400 Lights in Place on Granada Theatre Sign, Chicago

*Vertical Sign 104 Feet High—Illuminated at Night With 5,400 Lights*

By GEORGE J. DUERR

IT IS a foregone conclusion that the long line of "first nighters" who waited at the entrance of the new Granada Theatre, Devon Avenue and Sheridan Road, Chicago, gave little thought to the important part which sheet metal had in attracting them to this light-flooded fun emporium and in making them comfortable while enjoying the show.

As this pleasure-bent throng waited, little did they realize that the 5,400 lights which glittered, blinked and rotated above them were held in place by no less than eighteen tons of copper-bearing sheet steel in gauges ranging from 18 to 24, erected at a cost of \$40,000. Nor do the motorists and pedestrians

who nightly pass this mammoth structure, dedicated to enjoyment and recreation, know that this enormous sign costs its owners, Marks Brothers, between \$350 and \$400 a month to operate.

But to the sheet metal man who sees them there is inspiration to be derived from these figures. For the man in the industry who has already arrived there is a satisfaction in knowing that the industry of which he is a part is contributing so largely to the requirement of Mr. and Mrs. John W. Public. For the young man who is still in the stage where the pastures of the next field look much greener to him than his, jobs of this size and character will remind him that opportunities for

the employment of all of his talent and ability are not lacking in the industry.

The vertical sign is 104 feet high and 18 feet wide over all. Its frame is made of 18-gauge metal. For the base 20-gauge metal was used. The letters are constructed of 22-gauge metal, while 24-gauge, the lightest metal, efficiently serves the back.

The sign was erected by the Lu-mi-nus Signs, Inc., whose head is F. W. Peterson and whose offices and factory are located at 2736 Wentworth Avenue, Chicago. F. H. Ernst is sales manager.

The company manufactures all its own signs at its factory, where 100 sheet metal workers and electricians are constantly at work.



Verticle Sign Over New Granada Theatre Weighing 18 Tons and Carrying 5,400 Lights. The Sign Is 104 Feet High.

Signs similar in size and shape to the one erected on the Granada Theatre are also in operation on the Norshore, Chicago, Oriental, Terminal, Congress, Harding, State, Tivoli, Uptown, Belmont, Tower and Woodlawn Theatres in Chicago.

Is there romance in the sheet

metal, do you ask? I have only mentioned one comparatively small instance of the uses to which sheet metal is being put.

The cooling and ventilating systems of these same theatres, made of sheet metal, too, are something else again.

## Sheet Metal Men in Cincinnati and Vicinity Enjoy Dinner at Joint Meeting

*State President and Secretary Both Present  
—Will Hold Other Meetings During Winter*

**S**HEET metal contractors' organizations in all parts of the country will have to step lively if they are to keep up with the Cincinnati, Ohio, and vicinity organization and the Ohio State Auxiliary members. At a meeting of this body of men held November 3 at the club rooms

of the Disabled American Veterans, 2840 Melrose Avenue, more than 100 members responded to the urgent appeal of the Auxiliary Salesmen, and enjoyed one of Mrs. Lida Holland's very best dinners, dinners that have made her famous in that locality.

Presiding was Joe Stermer, of the Williamson Heater Co. Introduced at the dinner were W. H. Dailey, President of the Ohio State Sheet Metal Contractors' Association, W. C. Abbott, Secretary of the same organization, and Lee W. Gillespie, President of the Ohio State Salesmen's Auxiliary.

Among other notables present were L. Wayne Arny, Director of Public Relations, National Warm Air Heating and Ventilating Association, Harry S. Rogers, special representative of the Sheet Steel Trade Extension Committee, and Arthur P. Lamneck, former president of the National Association of Sheet Metal Contractors.

Mr. Briggs, of the Ohio Valley Slate Co., who is a member of the Salesmen's Auxiliary, entertained the diners with short and spicy stories, while Mr. Jackson, also an Auxiliary member, presided over the ivory keys.

Speaking of the banquet in retrospect, Lee W. Gillespie said: "We think this idea of having these joint meetings of the salesmen and contractors from time to time throughout the year very effective, and hope to have meetings of this type at regular intervals at other points throughout the state."

### Hotel Bethlehem to Be Used by Pennsylvania Sheet Metal Men

W. F. Angermyer, secretary of the Sheet Metal Contractors' Association of Pennsylvania, has received a communication from George A. Hesky, chairman of the convention committee, stating that he has reserved the Hotel Bethlehem for the 1927 convention of the association.

There will be very few single rooms available at the hotel at the time of the convention, April 5, 6, 7, according to Mr. Hesky, and it, therefore, behooves those who are planning to attend the convention to make their reservations early.

For complete information regarding rooms at the hotels, write to George A. Hesky, Bethlehem, Pennsylvania.



# Snow Fence Opens New Market for Sheet Metal

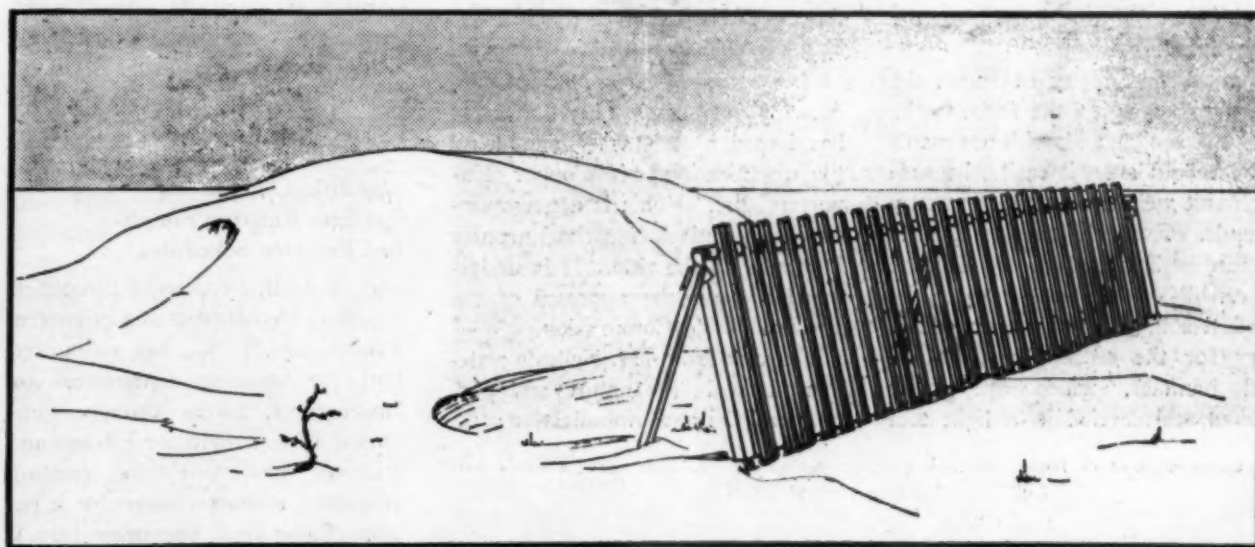
By H. F. COPE

**A** NEW means of snow control, the sheet metal snow fence, has opened a new market for sheet steel. Reduction of snow removal costs is now foreseen as one benefit to come, although the fence cannot entirely take the place of snow removal. But its use in the form of sheet metal will in many cases

fense" can be easily shifted with the wind.

Portability results in an economy of fencing as well as an increase in snow blocking efficiency. Usually only one set of portable units is needed in a cut, and the saving in cost over a double line of stationary fencing is probably more than

The principle of snow stoppage is simple. The wind strikes the faces of the V-shaped "vaness" or slats, is deflected across the openings between the vanes, and is slowed until it deposits the snow just behind the fence. The snow clears the units and drifts about two feet back. Therefore, the fence can never clog



The Metalvane snow fence made of ARMCO Ingot Iron places the drifts with great exactness.

prevent deep drifts and make railroads and highways more passable.

A single deep drift between two widely separated points on a highway often renders it impassable. And along isolated highways that can never hope for regular snow clearing service, this device is of special interest.

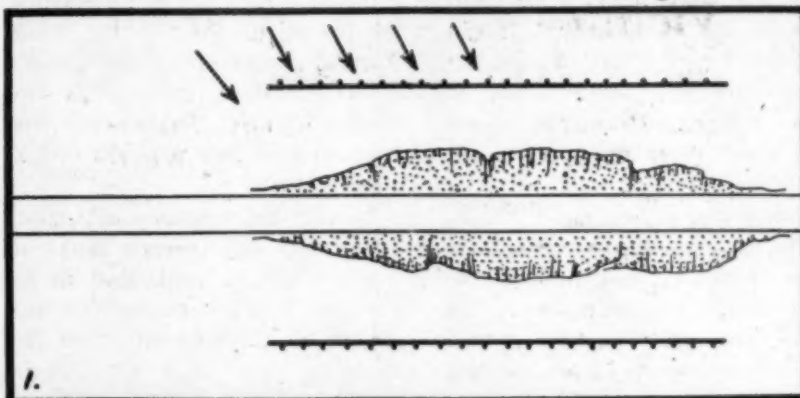
There has long been a need for a light weight fence that can be moved quickly and easily from one position to another with reference to cuts, ditches, or lesser breaks in the topography. One of the admitted shortcomings of the old style wood fence is that it works only when the wind is right. Sometimes it temporarily blocks the way, because it may clog with snow when facing the wrong direction. With portable units, the "line of de-

enough to offset the cost of labor in moving.

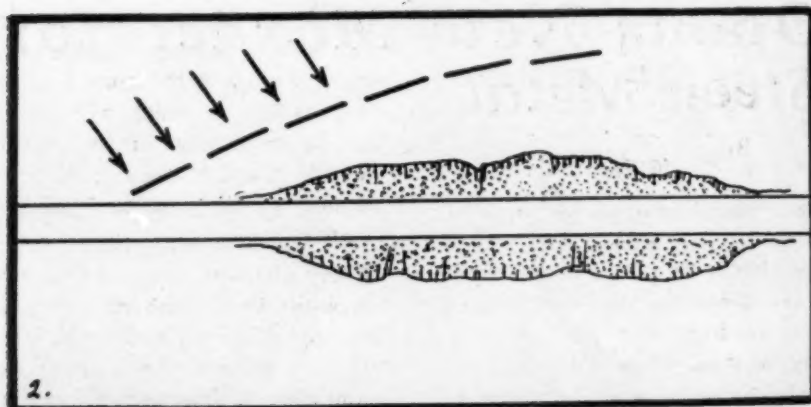
Haulage and installation costs of portable units are less than in the case of wood. Furthermore, the fire hazard, which is especially annoying in the case of railroads, is eliminated.

with snow.

The metal fence makes possible sure control of the location of the "dead areas" where snow is deposited. Each installation has been studied to determine the best location, the effect of the vanes on the flurries, the checking force, and the



Two lines of stationary fencing only partly protect the cut.



One line of Metalvane portable units can be shifted to give the fullest protection.

location of the drifts. The snow sometimes piles up higher than the fence itself.

At the first flurry of snow, the patrolman can haul the fence to the desired location, and, with one man's help, he can erect it easily, because each unit weighs only about seventy pounds. Even if the ground is frozen, he has no difficulty, because he can drive the frost pins into the hardest soil. The only tools necessary for the erection are wrench and hammer, which are easily packed and carried in a light tool kit.

The units are small enough to be easily handled. The frames are made of angles twelve feet long by four feet high. To both ends and to the middle are fastened angle iron A braces drilled at the bottom for frost pins. The vanes are three inches wide and are placed three inches apart. Their V-shape gives them strength to resist bending while being handled, which is also a big advantage.

Removal in the spring is easy because the fence folds to less than three inches in thickness. It can be piled along the way or stored in a comparatively small space. It does not depreciate nearly as rapidly as a wood fence, because it is built of galvanized pure iron, which is rust resistant.

The use of pure iron removes the fence from the classification of the temporary. The long life of the metal snow fence and the economies in erection, removal, and storage make its ultimate annual cost very low.

### Federal Trade Commission Approves New Copper Export Association

C. F. Kelley, president of the Anaconda Copper Mining Company, has issued a statement announcing the organization of "Copper Exporters, Inc." This is a new association organized for the purposes indicated by the title. It is understood to have the approval of the Federal Trade Commission.

Extracts from Mr. Kelley's statement indicate the nature and purposes of the new organization:

"Copper Exporters, Inc., is an organization of American copper producers associated with whom are certain foreign producers and sellers of copper. The purpose of the organization is to endeavor to eliminate in foreign countries the harmful speculation that causes wide fluctuations in price, unwarranted by industrial factors in European markets, and tends to destroy confidence in the integrity of such price and the stability of the business. The operations of Copper Exporters, Inc., are entirely within the limitations fixed by the Webb Act and amendments thereto, under which American producers of any commodity may join to protect the marketing of their products in foreign markets.

"Under the operation of Copper Exporters, Inc., copper prices in Europe will be established in accordance with general business conditions as they develop from day to day.

"The effort will be made to sell direct to consumers except where

conditions make it desirable, in facilitating export trade, to sell to distributors. An effort will be made to eliminate harmful speculation in copper."

The officers of Copper Exporters, Incorporated, are C. F. Kelley, Anaconda Copper Mining Company, president; F. H. Brownell, American Smelting & Refining Company, vice-president; J. Clendenin, Kennecott Copper Corporation, executive vice-president; L. Vogelstein, American Metal Company, Ltd.; T. Wolfson, Metals Sales Corporation; C. A. Austin, Phelps Dodge Corporation, and H. M. Brush, American Smelting & Refining Company, vice-presidents; J. deR. Storey, secretary; C. W. Welch, treasurer.

### Standing Committees Reaffirm Existing Simplified Practice Schedules

A. B. Galt, Division of Simplified Practice, Department of Commerce, Washington, D. C., has announced that the standing Committees on Sheet Steel, Eaves Trough, Conductor Pipe, Conductor Elbows and Fittings reaffirmed the existing schedules without change for a period of one year, beginning July 1, 1926. This action was taken by the standing committees at the meeting of the Metal Branch of the National Hardware Association in convention at Atlantic City.

From this it will be seen that the industry as a whole is so well pleased with the results thus far attained that it has decided to continue the present list for the ensuing year.

### W. R. Bertsch, V. P. of Bertsch & Co., Dies After Long Illness

W. R. Bertsch, vice-president and general sales manager Bertsch & Co., Cambridge City, Indiana, manufacturers of shears, punches, rolls and presses, died at his home on Oct. 17, following a protracted illness. He was 45 years of age and had been active in the company with his father and four brothers during his entire life.

## Statistics on Overhead Aid Contractor in Future Computations

*Bookkeeping Records Should Be Such as to Show Profit and Expense on Each Job*

**V**ERY often, when the sheet metal contractor is the busiest, he is not as careful to compare items, such as material, labor and expense, as he should be, and, therefore, when leisure again permits him to reflect on his busy period he finds routine practices neglected that should have been done, or they have been done hastily and often incorrectly.

To be forewarned is to be forearmed. As the contractor approaches the busy season of the year, he should heed the warning to provide to make proper comparisons between weekly and monthly expenses.

There is one expense that confronts all shops alike and which fluctuates each month and week, but the majority of the shops that are able to compare month for month with last year, the year before that, are able to obtain an approximate amount of expense for each week or month.

Almost every contractor compares the business done this month with that of the same month in previous years, as far as gross business is concerned. But what about making a comparison of expenses and profits for those same months?

One shop is making up bills, also figures the net cost of materials and labor, and notes the figures under the bill in the sales book. Then at the end of the month all of the compiling this statistical information items are added together and the contractor obtains the cost of materials used on all the jobs and the money spent for labor on those jobs during the month. A division of the yearly expense by twelve months gives the contractor an approximate monthly expense.

In the division of the expense for the year into twelve parts to find the monthly expense, it is only necessary to refer to the expense for

years past and allow for extra expense that might creep in during the year.

If the proper time and material is allowed on the jobs, which is usually correct, the only other item to fear is expense, which in the majority of cases robs the profit, if not carefully considered.

By keeping records of the cost of

material and labor on each job, the contractor is gaining valuable experience, while at the same time he compiles history which will guide him in computing future similar jobs and in addition he is able to determine his profit on each job accurately.

Very often the contractor is disappointed at the end of the year with the profit he has made. By he can compute the amount of profit on each job, month by month, he brings himself into much closer touch with his business than he could otherwise do.

## Tentative Draft of Uniform Mechanics' Lien Act Distributed for Comment

*If States Accept Act When Completed Much of Contractors' Grief Will Be at End*

**U**NIFORM state mechanics' lien laws have at last a champion in the United States Department of Commerce. The Standard State Mechanic's Lien Act Committee of the Department of Commerce, appointed by Secretary Herbert Hoover to draw up a mechanics' lien act to serve as a basis for more uniform state legislation on this subject, has mailed out copies of its first tentative draft to several hundred trade associations, labor organizations and individuals.

**Act Gives Sub-Contractor Hold on Owner or General Contractor.**

Existing mechanics' lien laws of the different states, as applied to building construction, aim to provide a procedure by which contractors, subcontractors, materialmen and others, if they are not paid promptly, may obtain some extra protection beyond their usual right to bring personal action against the owner or contractor. Under these laws the property and improvements afford security for the debts of those who have contributed to the improvement. To perfect a lien on the property each claimant is required to file for public record a statement of the amount due him.

If an owner fails to make payments as required by his building contract though property may be sold and payments made from the proceeds. If the contractor defaults or goes into bankruptcy, leaving obligations due workers, materialmen or subcontractors, they have a claim on the property. On projects carried to completion the total amount of liens is usually limited to the unpaid balance of the contract price of the work and where the improvement is not complicated the total of liens is limited to the unpaid balance of the amount earned by the contractor for the work performed. If the claims are not satisfied by the owner, a sale of the property may be compelled by court action.

**Men on Committee Represent Several Building Groups.**

The study made by the committee was undertaken at the request to the United States Department of Commerce of several national organizations interested in the construction industries, and the committee is composed of men representing the principal groups whose interests are affected by such laws, including those whose interests are those of the owner.



The tentative draft contains few new departures, practically all of its provisions having been found workable in several jurisdictions. The aim of the committee has been to produce an act which will adequately protect the interests of the worker and others concerned in construction, as well as the interests of the owner and those who finance building operations, and to distribute as equitably as possible among the groups the burden of securing such protection.

The tentative draft of the act is being distributed to individuals and to trade and professional bodies who will study it in detail and submit to the committee their comments and suggestions. The committee has requested that all comments be forwarded to its secretary before January 31, 1927. They will then be collated and carefully

studied by the committee with a view to perfecting the act.

The committee believes that a wide and thorough study will aid in producing an act which will be fair and just to all and which can be recommended to each state legislature for consideration.

#### Who Are the Members of the Committee Drafting the Act?

In order to show that the committee drafting the act has weight, and that the act was framed impartially a list of its members is given.

F. Highlands Burns, President Maryland Casualty Co., Baltimore, Md.; William F. Chew, Ex-President National Association of Builders' Exchanges; H. E. Essley, Associated General Contractors, New York City; George F. Hedrick, Vice President Building Trades Department American Federation of Labor, LaFayette, Ind.; Charles V.

Imlay, National Conference of Commissioners of Uniform State Laws, Washington, D. C.; C. Clinton James, President U. S. League of Local Building and Loan Associations, Washington, D. C.; Stewart A. Jellett, Ex-President Heating and Piping Contractors' National Association; William B. King, Counsel National Association of Building Exchanges, Washington, D. C.; Victor Mindeleff, American Institute of Architects, Washington, D. C.; Charles H. Paul, American Engineering Council, Dayton, O.; W. T. Rossiter, Ex-President National Builders' Supply Association, Cleveland, O.; E. W. Shepard, National Association of Credit Men, New York city; Frank Day Smith, National Retail Lumber Dealers' Association, Detroit, Michigan; Dan H. Wheeler, secretary Division of Building and Housing,

## Showing Langley How to Construct Cold Air Casing Shoe

### *Inquiry from Boulder, Colorado, Produces Solution to Interesting Problem*

By O. W. KOTHE, Principal, St. Louis Technical Institute

**R**ESPONDING to the inquiry of Wallace Langley, Boulder, Colorado, who desires instruction on a pattern for a cold air casing shoe, I first draw a right angle c-a-f in the side elevation, and from it measure off the radius of the throat, as a-b; then measure the diameter b-c, describing arcs b-e and c-f.

Divide one of these arcs into six equal spaces, which will locate the points for drawing the miter lines, as a-1', a-h and a-g. Then draw the center set line a-l, from which the half section "B" is described.

Next place the rectangle section "A," or at least place the transition I in the position desired, making the line A-B 10 inches in length. This transition can be made on center, as I show it, or it can be arranged level with the bottom.

The length of this transition is also made to your pleasure. After

which project lines from "B" into miter line 1'-7', and triangular lines to the corner A and B, as shown.

If desired, the point B can be carried horizontally further inward, to give a small flat space on top. This can be easily done, then following out the system shown.

To get the true lengths, pick the elevation lines, as A-1', A-2', A-3', A-4', and set these on the horizontal line in diagram of true lengths, to the right of T. Let H-T be the half width of elbow, or 10 inches in this case. Then from each point so established erect lines equal to those of section "B," and from these points draw lines to H. You will then have the true lengths for the bottom half of transition. Repeat this for the top half by picking lines B-4', B-5', B-6', B-7', placing them to the left of T, in diagram, and erecting lines to equal those of section "B." This gives 4'-5-6-7, which

are connected to H. You now have the true lengths.

Before developing the pattern for I it is well to develop the pattern for II, in order to get the proper girth along the miter line and to fit the transition to this girth. The girth for gore piece II is set off, using the spaces from section "B," or in figuring the circumference and dividing it up into spaces to correspond with section "B."

Since the pattern is no doubt understood, it being an ordinary pattern, and that 4'-3', etc., is the girth line to pick the stretchout from for along the round portion of transition. By measuring down, as 4'-4", and drawing a horizontal line, we have a pattern for gore IV.

So in starting the transition, draw any line, as A'-A", and make this equal to the width of the transition, or 20 inches in this case. Then pick

true length H-1 from diagram, and using A' and A'' as centers, strike and cross arcs in point 1.

Now pick the girth space 1'-2' from pattern II, and using 1 in pattern as center, strike small arc, as at 2. Notice that these two edges must fit together and, therefore, they must be of the same length.

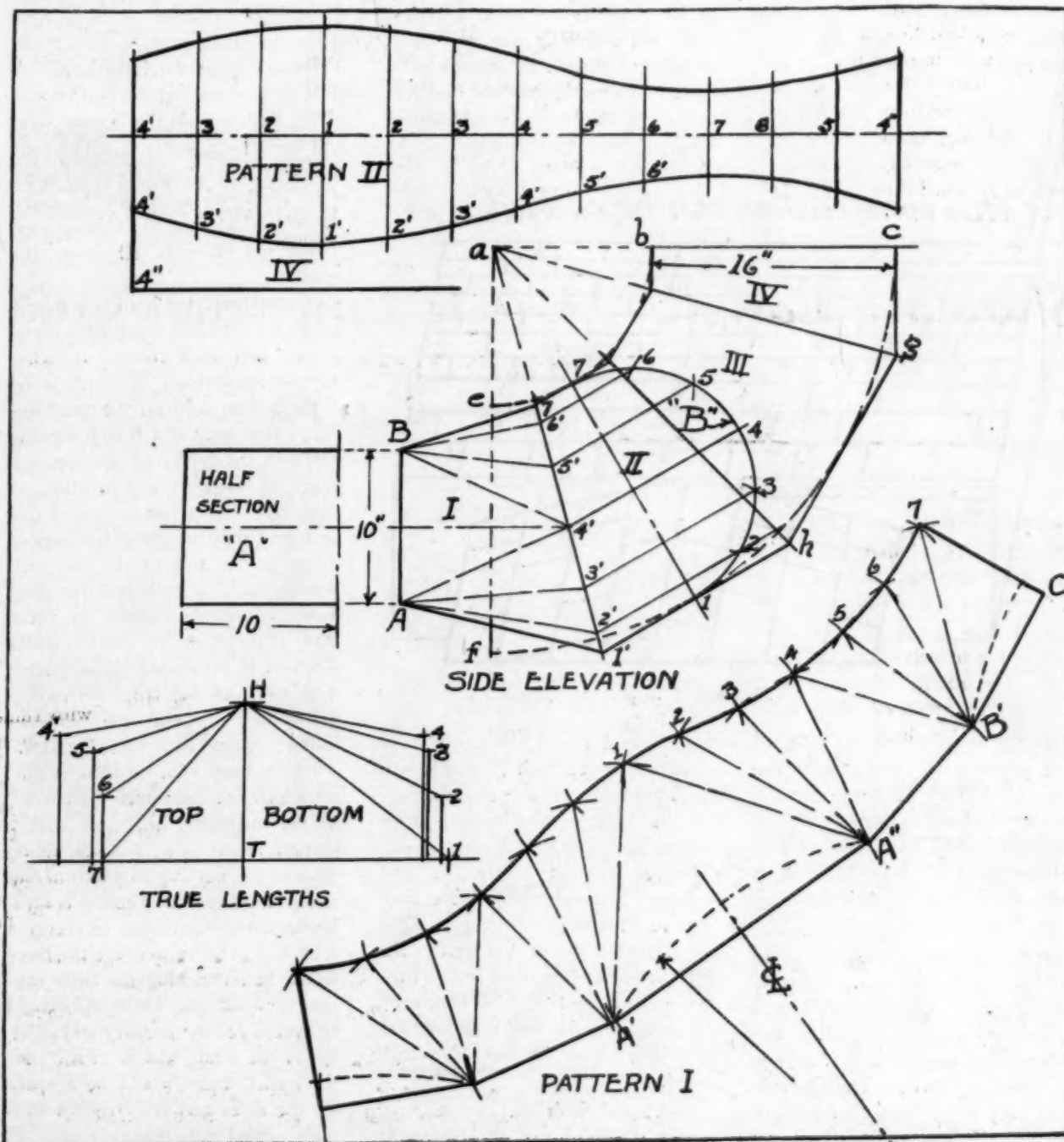
Now pick true length, H-2, and using A'-A'' as centers, cross arcs in point 2. Next pick girth space 2'-3' from pattern II, and observe how the spaces 2'-3', also 3'-4'

lengthen, since they are longer than 1'-2'. This also explains why each space must be picked separately, and not set dividers to one space and make all alike.

Continue in this way until points 4' are established, and then pick line A-B from elevation, as the height of rectangle base, and using A'-A'' as centers, strike arcs as at B'. Then using true length H-4' and 4' as center, cross arcs in point B'. After this use point B' as center while developing the rest of the fitting,

always picking the girth space direct from pattern II. When all points are established, sketch a free hand line through all points where arcs cross, make the other lines straight and you have the outline for pattern I.

The curve for setting against the casing can be cut out to suit any size of furnace; or the elbow can be used for other purposes. All patterns developed are net, so edges for assembling must be allowed extra.



Patterns for Elbow Transition

# Carpenter's Lack of Vision Makes Work for Sheet Metal Man

*Showing How Kitchen Extension to Main Building Presented Sheet Metal Problem*

By L. S. BONBRAKE

A CARPENTER will often fail to visualize his work, his conception of it fully completed being nil. Then when the job is actually finished he finds himself confronted with an awkward result. The illustration figure 1 shows a not infrequent result of such a failure to vis-

lined with metal. That would have made an ugly looking piece of work, inviting leakage and affording a catch all for leaves and rubbish, which would have eventually resulted in a rusted out metal trough—hence the following plan was used:

An eave trough of suitable size, 5-inch for a moderate sized building, was hung in the ordinary manner, abutting the comb as close as its

and emptying into the final flash, which in turn empties into the hanging trough beyond the comb.

As a precaution against these flashes being bent or broken under the weight of snow or ice, roof strips, as shown at x, x, Fig. 2 and 3 should engage the front bead. A cleat may be used at the bottom end of the flash to hold that corner solid and smooth—See Fig. 2. The roof flashing front should be no higher than absolutely necessary to carry the water, say 2 or 2½ inches; then it will not show at all from the ground.

It would not be a hard task to visualize the ultimate result of a metal gutter, laid in a channel 8 inches wide on the bottom. The only wood in the bottom used for the metal lining to rest upon is a 6-inch fencing board in the center of the channel. Work as diligently and carefully as you may, after a few months it will be found that the metal has sagged either at one side of the six inch bottom board or both and that dead water constantly stands in these sags. The sun, drying out the water—which is invariably impregnated with soot and dirt from the roof—will quickly start rust and then leaks follow, ending with ruined gutter.

I have lined with tin many a gutter which had been made "skeleton" by the carpenter, i.e., made with a bottom board only, no side lining whatsoever, nothing to which to nail except the cap and sheeting boards. Under these conditions wherever a seam had to be made in the tin, there would be no backing for seam support or wood into which nails could be driven for the security and solidity of the seam, and at times, near the outlet, there would be a space on the sides and end from 4 to 5 inches filled with empty space. A good connection must be seamed.

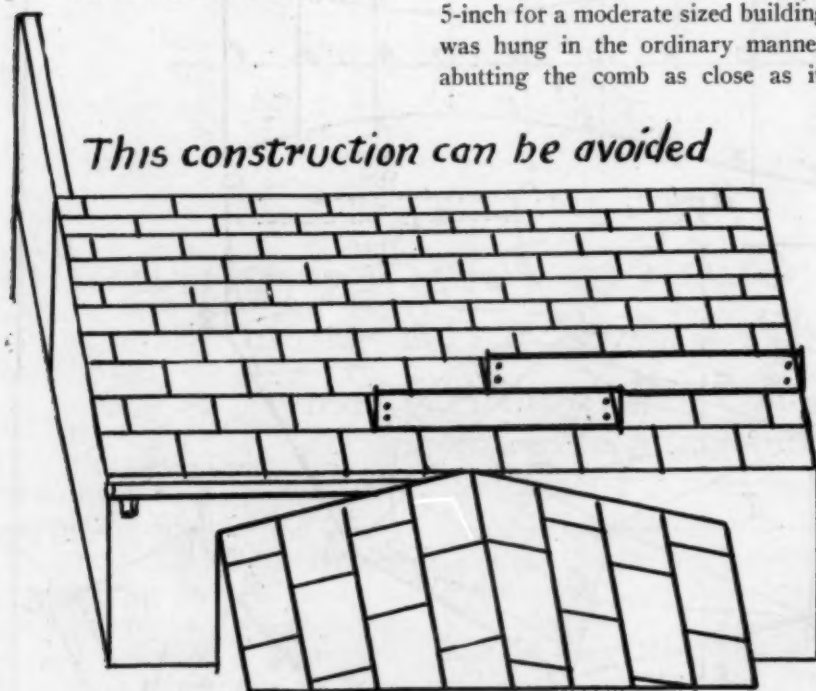


Figure 1

ualize the work which has resulted in a problem for the sheet metal man. A 1-story kitchen extension has been built up against the side of the main building, and its comb is so high that it will scarcely finish up under the eave of the main building.

The owner wants all of the water from the main roof conducted to the left for cistern purposes. The situation could be handled nicely with an ordinary roof gutter, but in this instance that was not satisfactory to the owner. The eave trough could have been hung the full length of the eave, if the comb of the lower building had been cut down and

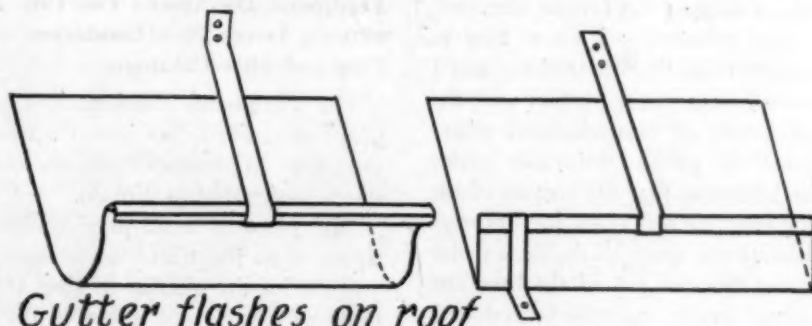
beveled end would allow. Then a square cornered flash (Fig. 2), or a flash made from eave trough, having its back portion turned down flat, as shown in Fig. 3, can be used. This is inserted under the first course of shingles above the eave course. This section is given a slight pitch toward the eave trough to the left and extending some inches over the end of the trough to insure all the water running into it and not being blown back in case of a high wind.

A second flash may be inserted under the third row of shingles if necessary, reaching to the gables.



and it is impossible to mallet a seam down against empty air. When we could get no air we set in a "cripple."

Figure 4 illustrates a circular gutter, with a two way run of water,



*Gutter flashes on roof*

Figures 2 and 3

which necessitates a high center and the direction of all seams in the gutter toward the outlet. Nothing approaching a practical or perfect construction can be secured by describing the proper radius on metal and cutting in for the height of the sides, forming up and soldering the same in a plain lap seam. I illustrate solid sides by Fig. 5 a section of gutter made at the shop by first getting the proper radius from the circular cut in the sheeting and front cap and the height or depth at the building cut the bottom plate x enough wider for forming edges to engage the sides Y Y to seam onto. These bottom seams may be thoroughly soldered in sections, giving a solid joint.

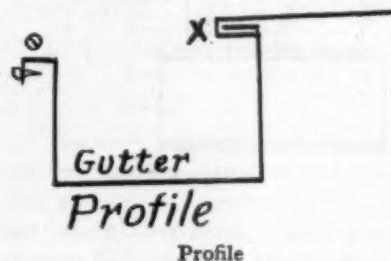
The prepared sections are placed in position by commencing at the lower points of the arc of the circle. The sections are connected by seaming or blind nailing. When the round of the circle has been laid, the top edge may be finished as shown by profile at O and X. This method is all right when the back joint is higher than at "O," but is inadequate when there is no great difference between the two sides.

Another method more watertight is to train the back edge of the lining to an inch higher than the roof sheeting, notch in a scant inch, and mallet the back lining on the sheeting board. The edge of the roof sheets to be fastened to the lining is cut to the radius desired with a horn left for blind nailing. It is

nailed close to the channel edge and soldered heavily. The solder is sweated in with a hot iron. An extra piece is needed for cornice cap covering and is applied as far back. The outer edge of cap cover is

trimmed to fit, an inch is turned down over the cap's edge by notching and malleting, then nail.

The "Bob Tail Eave Finish" as illustrated at X, fig. 6 would be considered a freak in most localities, however, I know of a number of instances where the wood work was



Profile

finished and the metal roof nailed at the eave, as shown at X. Of course it is wrong and very few appear now days.

The eave finish as shown at x gives no chance whatever to properly hang an eave trough that will catch all the rain water. If one were hung, the connection for nailing the roof bar, extending to the center of the eave-trough crossbar, would have no support to resist the weight of snow or ice which accumulates in winter.

When such a construction is giving annoyance by permitting water to run down between the trough and eave finish, I suggest taking the trough down. If metal eave trough brackets cannot be had to fasten into the roof joist, into which the trough can be laid, saw out the

wooden brackets and nail them to the siding fascia, giving the proper pitch for flow of water. Cut a strip of metal wide enough to press up under the old tin eave finish and extend out into the trough 2 inches.

Nail both old and new edges through the old tin holes. Then you will have an arrangement that will stop further trouble. A practical finish and the one generally preferred by builders is shown at the left (see H) with the sheeting extending beyond the outer wall, providing an extension over the back of the eave trough. Right here is where many carpenters again fail in visibility by guessing at the width of this extension. There is no ordinary commercial eave trough hanger on the market that will stay in alignment when the roof bar stands at an angle from the center of the trough to the top corner of the eave.

The heavy weight which it has to carry at times during the winter will displace it at some point. The roof bar should stand or hang straight from the center of the trough to the top corner of the sheeting, and the bend given the roof bar to fit the pitch of the roof for nailing should engage the eave corner, hence if 6-inch trough is to be used, the extension should be slightly more than 3 inches, or if an

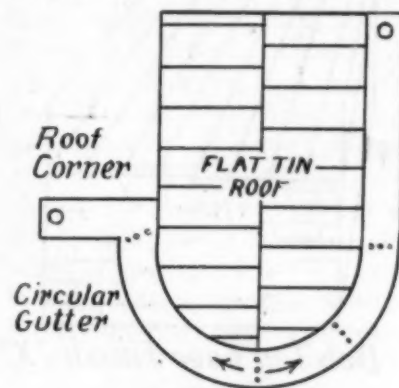


Figure 4

8-inch trough, 4 inches or more is given, etc.

I noticed a query in a trade journal. The query asked for an outline of a lawn vase that could be made in an ordinary tin shop. In the 90's, when all tinshops were undergoing a transformation, numer-

ous substitutions were evolved to continue work throughout the winter months instead of the shop ware usually depended upon.

The vase shown in the illustration, figure F, the bottom of which was 18 inches square and 12 inches high,

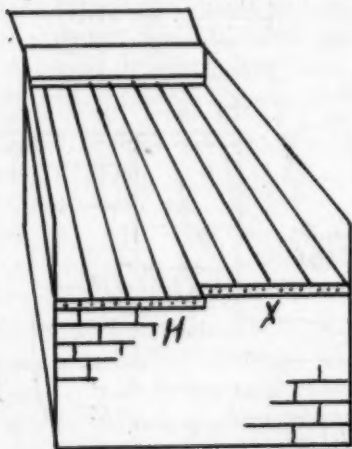


*Section Circular Gutter*

Figure 5

was made of No. 27 galvanized iron. The bottom edge was given a  $\frac{1}{4}$  inch fold. These formed inward  $\frac{1}{2}$  inch to stiffen the base bottom edge and avoid kinks or a buckle. This first section or base is seamed at the corners, an extension of  $2\frac{1}{2}$  inches is notched and formed down to partially cover the top of the base, giving it almost a flat outer edge cover of 2 inches all around.

The second section is 14 inches square, 10 inches high with an  $\frac{1}{8}$  inch hem formed at each end. The top is notched to form down to a



*Bob Tail Eave Finish "X"*

Figure 6

$\frac{1}{4}$  pitch and is seamed at the corners. This pitched portion is  $1\frac{1}{4}$  inches wide, which is notched and formed down from the top of the second section. The pilaster is 14 inches high and 12 inches square, with corners seamed with an 8-inch hem on each end. Then a tapered section to cover the pilaster, 6 inches

long and 3 inches at the top, is made to receive an urn which slips over the small end of the tapered section. The urn is 8 inches high and is cut as a miter pattern and is made from 12 to 14 inches square at the top. I suggest the former size.

Any tinsmith will know how to connect these several sections, and I leave that part of it to him with the suggestion of reinforcement where it will do good and further advise the workman that the bottom of the urn must be left open for drainage through the space of the neck under it and that the top of the base and second section must be braced with double edged strips for reinforcement that they will carry the load

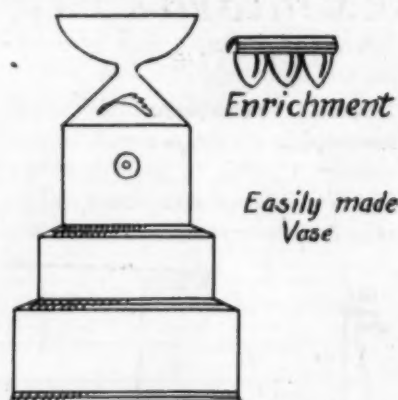


Figure 7

and weight contained in the urn. Rivet where necessary and trim the pilaster corners and top with the round formation of  $\frac{3}{4}$  inch of an eave-trough bead. Trim the tapered section corners and around the neck. Also trim the top edge of the urn with this same formation; however, tack scalloped strips 1 inch in length under the bead finish.

Some sort of an ornament should be used in the center of each pilaster panel, a rosette, for instance, and the figure of an oak leaf looks well in the center of each taper panel. Get an oak leaf and cut out a metal leaf from it. You may then twist the stem and spirals as wanted to tack into place. Usually a great deal of scrap strips can be used in the trim.

When the vase has been fully completed, except painted, a heavy coat of drab paint may be given it. While the paint is yet green, sand

it with "Diamond Dust" (all druggists) or iron ore, mortared or ground to sand, and you will have a piece of work of a pleasing appearance.

#### **Ferdinand Dieckmann Co., Cincinnati, Issues New Conductor Pipe and Shoe Catalogue**

The Ferdinand Dieckmann Co., Cincinnati, Ohio, has issued a new catalogue on conductor elbows and shoes, designated as No. 26.

The piece is a 25-page booklet which is so illustrated as to represent the infinite number of sizes and types of elbows and shoes in their true light.

Prices and other information of use to the sheet metal contractor are also included in the publication. Valuable tips on erection methods take up a considerable portion of the book. Every sheet metal contractor can profit from the information contained in it.

#### **Where Is Tech Brothers, Makers of Kalamein Doors, Located?**

TO AMERICAN ARTISAN:

Can you give us the address of Tech Brothers Company, manufacturers of kalamein doors?

Yours truly,  
W. A. KUEHL.

#### **Every Member of Store's Force Should Be on Hand at Opening**

What time do you get to work in the morning? Eight o'clock? Oh you don't? Well, the exact hour of your arrival does not matter, as working hours vary in different cities. It is whether or not you are at your work at the opening hour. If you happen to be one of those who are on the job when the doors open in the morning, you have no need for reading further, for it is those who get down in the morning an hour or so after opening time to whom I wish to speak.

My experience has been that in most Hardware stores the busiest time of the day is for an hour or more after opening. That is the time when the contractors, carpen-

ters and other workmen wish to purchase their needs for the day. Why, then, should any store operate at such a time with half or even less of its personnel? Why should customers have to wait to be served while some of the employees are still at home? There is no good reason for this evil. Yet it exists in many Hardware stores that otherwise operate efficiently. The only reason for this evil is that some have the privilege of coming to work late and they take advantage of it. Those who work in factories must be at work when the whistle blows, and a store should be no different. In

each the opening minutes are of equal importance.

My contention is that every member of a store's force should be on the job when the store opens in the morning, and such a rule should be made by every merchant, but there should be no loop hole for anyone. The rule should apply to every employee, including the boss himself right down the line to the errand boy. We hear a great deal these days about efficiency, but there can not be efficiency in any store where part of the sales force get to work an hour or so after the store is supposed to be open.

## Sheet Metal Serving Chicago's New Union Station Extensively

*Records of Three Railroads Preserved in Sheet Metal Containers There*

**A**N orderly arrangement for all materials, supplies and stocks is the first essential of modern efficiency. But "keeping everything in its place" requires a place for everything. Sheet steel equipment is now playing a tremendous part in providing such places, says *Making Markets*. This publication goes on to say:

"A study of Chicago's new \$100,000,000 Union Depot shows something of the tremendous quantity of such equipment that is required by modern business. In the Union Station project alone there are more than 100 tons of sheet steel for lockers, shelving, boxes, and cabinets, this in addition to the large quantity of sheet steel kitchen equipment, lockers and storage cabinets used by the Fred Harvey system in connection with its dining service.

"Mr. C. E. Coffman, of the Engineering division, unhesitatingly boosts steel equipment: 'It is, of course, cheaper in the long run; it does not warp, it is fire-safe and it is not easily destroyed by rough usage, but actually if careful compilations are made of present costs of labor and material, the equipment may be duplicated at an equal price of any other construction. Several

of the shelving units we have in the Union Station are from old equipment that has been in use some seventeen years. The only item of upkeep in that entire time has been a coat of paint.'

"The statement of the sheet steel shelving industry that it can furnish a place for everything, is borne out by the wide variety of material stored in their various products throughout the station. Everything from lanterns to employes' clothing, from incoming mail to passengers' parcels, is stored in steel.

"A good idea of the effectiveness of this storage system is shown in the parcel check-room. This equipment is provided with a mezzanine floor, giving extra capacity for rush periods. More than a million parcels are passed in and out of this compact storeroom each year. The income runs over \$1,000,000.00 annually. Actually the installation pays for itself something like two times each month.

"In the baggage room record office 365 steel boxes are provided to store the year's records—a box for every day in the year. Other boxes provide for the Lost and Found items. In the railroad mail division other steel shelving pro-

vides space for distribution and delivery. Lockers are provided for every class of help, with rest rooms and white tile washrooms and showers adjoining the locker rooms. The lockers have sloping tops to prevent employes from tossing papers, milk bottles or other discarded material 'up on top.'

"So on throughout the station, whether it be for the requirement of the employes or the requirement of the transportation business, sheet steel will be found the choice of this type of equipment. In baggage, mail and record rooms, the tops of steel shelving and cabinets serve as desks. 'Nothing but steel,' remarks Mr. Coffman, 'could stand the rough treatment nor wear nearly as long. Merely glue linoleum to the steel top and you have a writing surface that will neither tear, scratch, warp nor slide.' This favorable opinion with which sheet steel is regarded in this new installation is based on actual experience. When the old Canal Street Station was torn down most of the interior equipment was disposed of but the old sheet steel shelving and locker equipment, having suffered not one particle of depreciation after years of hard use, was again installed in the new building.

"As is noted above, the use of sheet steel by the Union Station Company has been duplicated in connection with the Fred Harvey restaurant division. Here it not only serves for the storage of supplies and employes' clothing, but also we find it almost entirely used for the equipment required in the actual preparation of food. Sheet steel gas ovens, automatic mixing vats, ovens and oven trays, metal soup vats and so on, in an endless variety of sturdily constructed and attractive sanitary products.

"One cannot go through these immense kitchens without being impressed with the tremendous improvement sheet steel makes possible both in sanitation and efficiency.

"The Union Depot is owned by three railways. The Pennsylvania, C. B. & Q. and C. M. & St. P. These, and the tenant railroad, the Chicago



and Alton, operate some 300 trains daily in and out of the station. The importance of the widespread use of sheet steel in this huge business undertaking is that it is typical of the use that is being made of sheet steel in every kind of industry. It in-

dicates the tremendous markets which have been and are being opened up for further service by fabricators of sheet steel products. It is worthy of note that practically all of the Union Depot sheet steel equipment is of standard design.

## Officers Illinois Sheet Metal Association and Auxiliary Hold Meeting

*Large Representation Gathers to Enjoy Live Meeting and Dinner as Guests of Peoria Local*

By J. F. JOHNSON

ON order of officers of the Illinois Sheet Metal Contractors' Association a directors' meeting was held in the offices of the Peoria Local at Peoria on November 10th. Present were Griff George, President; Fred J. Graeff, Secretary; Rudy Jobst, Chas. N. Louis, James Barrett, Treasurer; Ralph Poe, Wm. A. Smoeger, Joe Connors, Wm. Slater, George Harms, Joe Walter, Sam Pearson, John Neuman and others. The Auxiliary was represented by President H. R. Harrison, Oliver C. Ingledew, Louis Denoyer and J. F. Johnson.

The business of the meeting was the selection of the date for the 1927 convention which is to be held at Ottawa, Illinois. April 6th and 7th were selected as the most convenient.

The subject of group insurance was brought up by Secretary Graeff, who explained that several members are carrying such insurance, but that the association was not receiving the benefits, as this insurance was not directed to their association. After considerable discussion for and against this form of insurance, it was suggested that the matter be brought up at the next convention.

The date for the group meetings was another subject which received a great deal of attention.

It was decided that the meetings be held in December, but the dates were left open on the suggestion of George Harms, who suggested that Secretary Markle of the National Association of Sheet Metal Contrac-

tors be notified and invited to attend.

In this manner, it was pointed out, Secretary Markle could best help the organization work of the locals by addressing prospective members at their group meetings.

Mr. Harms explained the new arrangement by which the national secretary would be freer to travel and help in organization work.

It was also decided that another board of directors' meeting will be held in February at Ottawa to discuss further plans for the convention.

Initial plans for the convention include an invitation to Secretary Markle and speakers who can talk on cost accounting systems.

In the evening the boys were the guests of the Peoria local. They were taken by autos to Crawls roadhouse, where they partook of the finest of chicken dinners. After the tables were cleared and cigars lighted, Henry Bauman, President of the Peoria local, introduced Charles N. Louis as toastmaster.

Mr. Louis called on George Harms. Mr. Harms told of the old days and contrasted them with the present. He found much to rejoice in today with better business, better wages, better hours and better homes.

Organization had done much to bring this about, he said, and as a director of the National Sheet Metal Contractors Association pointed out work being done at present.

Mr. Harms called attention to the

work of the Trade Development Committee, which meets again on December 6th. A full representation is expected at this meeting, and Mr. Harms stated that all departments were well up on their work and completion of the standard specification book is near at hand.

He also called attention to the new size of the association's mouthpiece, the National Sheet Metal Contractor, and stated that it was to be greatly improved.

Mr. Harrison spoke briefly of the Travelers' Auxiliary, pointing out the increase in membership, and the publication of the Auxiliary Roster.

J. F. Johnson, member of the Publicity Board of the Auxiliary, also told about the co-operation of the auxiliary in the window display competition and reported on the work of the Auxiliary Secretary.

Joe Pearson of Ottawa praised Peoria for its pioneer work in organizing and putting Ottawa in the Association, and said that Ottawa would show its appreciation at the convention. Wm. Smoeger, of Peru, spoke about the new timber to be gathered in territory surrounding Peru.

R. J. Jobst was next called on by toastmaster Louis, and Rudy told about the work of the auxiliary, urging all members to post their rosters in copper frames, as he had done. He stated that the attendance at conventions had increased steadily since the auxiliary had been in operation.

Mr. Jobst was in favor he said of increasing the salary of the Secretary, as work that was necessary took a great deal of time. Much discussion took place and Mr. Louis gave an especially stirring talk on the question, in which he showed himself highly in favor of increased association dues and the hiring of a full-time, adequately paid secretary.

Mr. Harry Becker of Peoria was called on to talk about the Peoria apprenticeship situation. Mr. Becker said that in one year's time the Peoria Local had far exceeded its expectations and that today it had boys turning out work that shows distinctly that their plan is

successful. He urged other cities to take up the matter of apprenticeship in their public schools. Mr. Louis also told about his interest in the apprentice work, as he had been greatly surprised at the quality of the work and the success of the plan in general. The hour was

quite late when the meeting was adjourned and everyone felt that a worthwhile conference had taken place and that the best chicken dinner obtainable had been eaten, with the most hospitable of hosts and with the warmest of warm spirits obtainable.

## ***Furnace Dealers Will Hear Prof. V. S. Day at Rock Island***

***Men Attending Guests of Rock Island Register Co.—  
All Welcome to Banquet—L. W. Army Also Expected***

**P**ROFESSOR V. S. DAY of the University of Illinois warm air heating research department will address more than 200 warm air furnace dealers at the Fort Armstrong Hotel, Rock Island, Illinois, Thursday evening, November 18. Professor Day's address will be preceded by a banquet.

An invitation to attend the banquet and lecture is being broadcast by Sam P. Burgess of the Rock Island Register Company, Rock Island, Illinois, and those who attend will be that company's guests. His letter follows:

"You are cordially invited to be our guest at a banquet, Thursday evening, November 18th, at 6:30 in the Fort Armstrong Hotel, Rock Island, Illinois.

"Professor V. S. Day of the University of Illinois, who is in charge of the experiments in the National Warm Air Heating and Ventilating Association Research Residence, will give an illustrated lecture on the results of his work, which has a vital interest.

"Mr. L. Wayne Army, director of advertising for our National Association, is invited to be present and to give an outline of the object of our National Association advertising program and its relation to the furnace installers through their co-operation with the furnace dealers and their work.

"This will prove an interesting and profitable meeting and your presence is earnestly requested. Come if at all possible.

"Looking forward to the prompt

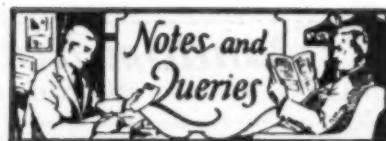
return of your acceptance card, we are."

### **Tregoe Sees Artificial Stimulation in Instalment Selling**

Instalment selling is creating an artificial trade stimulation that cannot give permanency to production, J. H. Tregoe, executive manager of the National Association of Credit Men, said in a statement issued to the association's membership.

"When analyzing production and marketing," Mr. Tregoe said in his statement, "it is well to consider whether active movements have been brought about by natural or artificial stimulation. It is a very easy matter to forget the past, but the past is useful in setting up experiences and situations which may be duplicated by the combination of similar causes.

"If we accelerate our production and our marketing by unnatural methods or under the spell of unnatural ideas, the stimulation will prove artificial and the collapse must come some time. It isn't an easy task to distinguish in instances between natural and artificial stimulation. It is claimed, and rightfully so, that selling commodities on the deferred-payment plan has stimulated production, but when the redemption of credit contracts rests on the uncertainties that at the best must surround future income, the stimulation may prove artificial and not give the permanency to our production that would stand the pressure of any contingency."



### **"Monarch" Gasoline Cook Stove.**

From Otto Schuman, Wisconsin Rapids, Wisconsin.

Who makes the Monarch Gasoline Cook Stove?

Ans.—Excelsior Stove and Manufacturing Company, Quincy, Illinois.

### **Damper Quadrants.**

From Standard Sheet Metal Works, 1405-15 30th Street, Milwaukee, Wisconsin.

Who makes damper quadrants for heating systems?

Ans.—Parker-Kalon Corporation, 352-362 West 13th Street, New York City, and carried in stock in Chicago by Carr Supply Company, 415 North Dearborn Street.

### **Fireplace Equipment.**

From S. P. Hedges, Rochester, Indiana.

Kindly give me address of firm in Chicago that makes fireplace equipment.

Ans.—Colonial Fireplace Company, 4611 Roosevelt Road, Chicago, Illinois.

### **Copper Buckets.**

From R. W. Tyler, 44 White Court, Canton, Illinois.

Kindly tell me who makes 12 quart heavy copper buckets, 20 ounce spun copper, reinforced rim on bottom.

Ans.—George W. Diener Manufacturing Company, 400 Monticello Avenue, Chicago, Illinois.

### **Address of Estate Stove Company.**

From Louis F. Brandt, Glencoe, Minnesota.

Kindly give us the address of the Estate Stove Company.

Ans.—Hamilton, Ohio.

### **Copper Floats.**

From W. A. Yaeger, 33 Woodlawn Street, Geneva, Ohio.

Please advise us who makes copper balls for floats in tanks.

Ans.—Friedley-Voshardt Company, 733 South Halsted Street, Chicago, Illinois; Gerock Brothers Manufacturing Company, 1252 South Vandeventer Avenue, St. Louis, Mo., and Berger Brothers Company, 237 Arch Street, Philadelphia, Pennsylvania.

## Random Notes and Sketches

By Sidney Arnold

"The essence of humor is sensibility; warm, tender fellow-feeling with all forms of existence."—Carlyle.

While in Peoria the other day I called on my old friend P. O. "Pete" Johnson. "Pete," as all the boys know, has been confined to his home for the past nine months because of illness. I found "Pete" enjoying an easy chair, a good cigar and a cheerful frame of mind. He is anxious to get back on his rounds and when his normal strength returns, he will be on the job and at the conventions as usual. He told me to say "Hello" to the rest of the boys for him.

\* \* \*

A very distinguished guest came into our office on Thursday morning of this week. He was none other than the president of the National Warm Air Heating and Ventilating Association, Mr. E. B. Langenberg. Mr. Langenberg is certainly looking fine after his summer vacation. He was in Chicago to attend some meeting or other. You know he is such a busy man that it is hard to keep track of his various journeyings to and fro. He is looking forward to a splendid meeting at Urbana the 1st and 2nd of December.

\* \* \*

"Miss Curlycue," murmured the office manager to the stenog, "I don't wanna be harsh. Nothin' like that. I really don't."

"Let's have the answer," said the damsel nonchalantly. "What's bitin' you now?"

"I just wanna ask you not to write your young man during business hours. Letters are apt to get mixed. Herb & Blurb report we have sent 'em a shipment of love and kisses instead of the axle grease they ordered."—*Penn. Punch Bowl.*

\* \* \*

Mine was the pleasure on Monday of this week when C. R. Heidbrink of the Gem City Pattern Company, Quincy, Illinois, paid a visit to the office. I enjoyed meeting Mr. Heidbrink very much. He came to

Chicago on business and dropped in to get some information. I hope that on future visits to Chicago he will not forget where we are located.

\* \* \*

### Hard on the Watermelons.

A colored preacher was vehemently denouncing the sins of his congregation. "Brethern an' sistern, Ah warns yo' 'gainst de heinous sin of shootin' craps! Ah charges yo' 'gainst the black rascality of liftin' pullets. But, above all else, bredern an' sistern, Ah demolishes 'yo' 'gainst de crime of melon-stealin'."

A brother in the back seat made an odd sound with his lips, rose and snapped his finger. Then he sat down again with an abashed look.

"Whuffo, mah fren'," said the parson, sternly, "does you 'r'ar up an' snap yo' fingers when Ah speaks of melon-stealin'?"

"Yo' jes' remin's me, parson," the man in the back seat answered, meekly, "whar Ah lef' mah knife."  
—*National Contractor.*

\* \* \*

Mike (in prison)—"Hello, Wop, how come—what you doin' here?"

Tony (ditto)—"Well, it's lika dis. I'm out to get it easy, my friend da judge he geev me a meal-ticket, free eats, free sleep, noddings to worry about—why not be here?"

"Say, Irish, why you here?"

Mike—"Well, Tony, I'm on my way to hell and just stopped off here."

Tony—"You tink you make it?"

Mike—"What? hell; hell, yes, I'm there now."

\* \* \*

I had a rather unusual communication from Alliance, Ohio, this week. It came from John A. Huth, a sheet metal contractor located at 736 South Freedom Avenue. The letter was unusual first because in it I learned that Mr. Huth's next

birthday will make him an octogenarian, and secondly, that he intends on account of ill health to retire from active business. Mr. Huth's letter was written in a firm, easily legible hand, showing strength of mind and character and physical endurance at an advanced age. It is a distinct pleasure to receive communications of this sort, a pleasure that is greatly appreciated. I have no doubt that Mr. Huth's experiences in the sheet metal industry would prove of great interest to the younger men in the industry today.

\* \* \*

Customer—"I want to return this book I bought, 'Stories for All Occasions.'"

Bookseller—"What's the matter with it?"

Customer—"It's a fake! There's nothing there for a man to tell his wife when he get home at 2 a. m.—*Brooklyn Eagle.*

\* \* \*

One of my friends, and I have a kind-of-an idea it was Frank Harrison, sent me the following announcement the other day. Where he had been or what he had been drinking I am sure I have not the slightest idea, and of course I wouldn't think of doubting his respect for the prohibition law. Judge for yourself.

"Mr. Lucy Anderson and Miss William Smith were disposed of at public auction at my farm one mile east of a beautiful cluster of roses on her breast and two white calves, before a background of farm implements too numerous to mention in the presence of about seventy guests including two milch cows, six mules and one bob-sled. Rev. Jackson tied the nuptial knot with about 200 feet of hay rope and the bridal party left on one good John Deer Gang plow for an extended trip with terms to suit purchasers. They will be at home to their friends with one good baby carriage and a few kitchen utensils after ten months from date of sale to respectable parties and some chickens."



## The Editor's Page

### Workers' Attitude Important to Employer

**L**ABOR is admittedly the largest item in any program of production, be it large or small. In large scale production success or failure may depend upon the saving of exceedingly small units of time on each operation.

Recognizing the fact that no worker can give his full production capacity to his employer when troubles of one kind or another are exerting an influence upon his mind, the Richard-Wilcox Manufacturing Company, Aurora, have gone so far as to employ trained nurses. A constant check is made not only on the health of all workers, but upon that of the members of each worker's family. If it is learned that sickness has entered any worker's home, a nurse is dispatched at once to that home to take charge. In that way the mind of the employee is relieved of the worry that would otherwise be present.

Within the shop itself everything is done to show the employees that the company is trying to be fair with them, not only in matters of wages, but in every other way.

The psychology back of it all is very good indeed. Needless to say that the desired results are being produced.

### Are Sheet Metal and Furnace Men Building for Better Business?

**B**USINESS is in a constant state of evolution. The modes of doing business in vogue today are in use because these methods have been found to produce the desired results—which is sales volume—the most economically and with the greatest satisfaction to the ultimate consumer.

But when these conditions cease to obtain, other methods are substituted.

The sheet metal contractor and the warm air furnace installer are not immune from this law of evolution.

So far the manufacturer of sheet metal products has found no method of distributing his products that will do the job more thoroughly than the sheet metal contractor can do.

The manufacturer of either sheet metal products or warm air furnaces has no object in changing his methods of distribution so long as the sales volume which he expects is maintained and so long as the satisfaction of the customer is assured.

But let the sales volume drop off for almost any reason at all and the manufacturer immediately begins casting about for a chance to find a new way

to distribute his products to the consumer.

In fairness to himself, to the manufacturer whose products he handles and to the public whom he serves, the sheet metal contractor and the warm air furnace installer should see to it that he takes advantage of every legitimate opportunity to increase his volume of sales and to do every job in a first-class manner.

It is up to the contractor and installer to sell himself and his services not only to the manufacturer, but to the public as well. By so doing he gives them constant proof that his method gives the greatest satisfaction and is the most economical. Because one method has been used for a long period of time and is now in use, is no sign that it will always remain. It remains only so long as it is the most economical way of getting that work done.

### Tax Reduction Again in Prospect for Some

**T**AX reduction rumors are again in the air. The big question now is, will there be a federal government tax reduction and if so, who will it benefit and by how much?

That Congress will jam a permanent tax reduction bill through during the coming session seems hardly likely; nevertheless, at the present time the outlook for an individual and corporation tax reduction of about 12½ per cent is extremely good. But how will it be brought about?

If a reduction on the amount of taxes to be paid on the income of 1926 is brought about at all, it will be by a temporary measure. It will refer only to the present anticipated treasury surplus. In other words, if the temporary measure which is now being considered goes into effect, the individual and corporation will be permitted to deduct from the amount of the tax which they would ordinarily pay on their 1926 income 12½ per cent.

It is believed that President Coolidge and Secretary Mellon are acting in accordance with sound economic policy in presenting to the House Ways and Means committee a restrictive tax reduction plan; that is, one which applies only to the tax to be paid on 1926 incomes.

For the present it makes little material difference whether the reduction is accomplished by temporary or permanent measures, as long as the reduction actually comes.

Whether the opposition that is sure to be encountered from the farm bloc can be overcome remains to be seen. One thing is certain and that is that there will be no rebates on the final payment of the 1925 tax payment which will be made in December.

## Furnace Installers Can Profit by Use of Local Newspapers

*Editorial Columns Open to Their Use if Gone About Properly*

THE National Warm Air Heating and Ventilating Association is constantly broadening its service to warm air furnace installers who have shown a willingness to conform to the Standard Furnace Code installation practice.

The latest effort of this association, being made through its department of public relations, is a letter to Standard Code dealers instructing them on methods of using the editorial columns of their local newspapers in a profitable manner.

The letter and one of the articles referred to in it are given below. It is hoped that this material will be used to good advantage by the warm air furnace installer.

"Editors of local newspapers usually welcome news items that come from their own readers.

"You can use your local daily in this way to stimulate greater general interest in warm air heating. There is a great deal of actual news value to the warm air story, without having to resort to propaganda or 'free publicity.'

"Herewith you will find two stories. We suggest that you add some local color to these, such as inserting your own name, and then retype them in the same form as they are presented. Or, take them just as they are to your local editor—one each week. It is important that you take them personally—not send them. Explain to him that his readers are vitally interested in the proper method of heating their homes. If you are not already doing so, insert a regular advertisement in his paper so that they can tie up with the stories.

"If you follow these suggestions, you will find that the effort will be worth while and that there will be increased interest in warm air heating in your community.

"When you have used the enclosed stories, write to the Publicity

Bureau of the National Warm Air Heating & Ventilating Association, 174 East Long street, Columbus, and more will be sent to you.

"We would appreciate any clippings that you can send, showing the stories in print."

\* \* \*

The good housekeeper never has dust and dirt in her home from the furnace, according to a prominent local furnace dealer. In spite of an idea on the part of many home owners that dust and dirt come up from the furnace, this is not the case if the furnace is properly installed.

According to this authority, dust streaks on the walls over registers come from dust in the air that has collected in the boxes and that leaks out around the joints where the register boxes fit into the walls—not through the register itself, or from the furnace.

As a sure remedy for this trouble, it was suggested that the register

face be removed and the register box be cleaned either by inserting a vacuum cleaner or wiping with a damp cloth. After the register has been replaced the joints around its four edges should be tightly closed with plaster of paris. That will end the trouble until next year when the same operation should be repeated.

One local furnace dealer stated that in the research residence at Urbana, Illinois, a house that was erected by the National Warm Air Heating and Ventilating Association as a home heating laboratory for the engineers at the university there, light toned decorations and white woodwork have been subjected to two winters' exposure to heat and are now as clean as when they were put into the house. This, he states, is because great care was taken to seal all of the register faces so that no dust could leak around their edges. Every fall the register faces are removed, cleaned and then replaced after which the cracks are again sealed. This is a simple operation that requires but a short time and no skill or experience. All that is necessary is to have the joints tight and other parts in ship shape.

## Excelsior Holds Annual Sales Conference at Chicago

*President A. W. Glessner Reviews Company's 40 Years' of Progress*

THE Excelsior Steel Furnace Company held its annual conference of central states branch house managers, sales managers and salesmen at its home office in Chicago during the week of November 8th. The meeting was marked by a series of dinners, theater parties and an inspection of the enlarged plant of the company on Goose Island, in the city named. A feature of the conference was the presentation to each participant of a portfolio detailing the progress made by Excelsior during the present year.

At the opening dinner at the Illi-

nois Athletic Club, A. W. Glessner, president, welcomed the guests and among other things said: "When we came together for our conference a year ago you found us in the midst of a building program at our Goose Island plant, in order to provide additional space for our rapidly growing business. Today you have inspected the completed building and equipment and no doubt were surprised at the changes which you found.

"The new structure, together with changes in the old, has enabled us to increase largely the production of round pipe, to create an entirely

new department for the manufacture of bonnets and casings, which will more than double our capacity for making the same, to provide and install new machinery for doubling the capacity of our double wall pipe section, to increase our machine shop dimensions forty per cent and to secure additional space for the manufacture of reducers and large hoop elbows. You also noticed the rearrangement of other departments to permit larger output and increased efficiency.

"You will no doubt be interested in knowing that the plant which you visited with its contents represents a value in excess of a million and a quarter dollars with absolutely no debt upon the same and that in addition that we own free from debt warehouses and stocks in Kansas City and St. Paul, together with stocks of merchandise in Brooklyn, N. Y., Pittsburgh, Buffalo, Des Moines, Sioux City, Denver, Portland, Oregon and Galena, Illinois, totaling in value several hundred thousand dollars. This property has all been accumulated from an initial investment of twenty-five hundred dollars a little over forty years ago. During that time hundreds of thousands of dollars have been paid out in salaries, dividends and in the development of improved goods for the warm air heating industry.

"Not only do we own our own business homes, but our officers, managers and department heads also own their family homes almost without exception. In Chicago, our president, our vice president, Mr. Scherer, our treasurer, C. E. Glessner, our assistant superintendent, J. J. Holub, our office manager, F. E. Ford and the manager of the furnace department, J. P. Brooks, are all home owners.

"In Pittsburgh our manager, A. H. Johnson, not only owns his own home but several other pieces of property including a warehouse for which he paid \$32,500.00 cash a few months ago.

"In Kansas City J. B. Fehlig owns his own home, other real estate and a large acreage of land in Okla-

home in the vicinity of a developing oil field. A. B. Glessner, manager of our St. Paul branch and H. C. Middleton, sales manager, own their residences which are located in Minneapolis.

"When you visit Chicago a year hence you will approach our factory over a 10-inch solid concrete pavement which should last a thousand years. You will also find im-

provements and enlargements in the plant itself as there is every indication of a demand next year which will compel further enlargement of our capacity. As you are aware we own unimproved land adjoining our plant on which to erect further buildings and thus enable us to supply Excelsior products which this and succeeding generations will require."

## Manufacturer Co-Operates With Dealer in Building Good Will

*Furnace Dealer and Maker Have Joint Responsibility to Public*

WHAT is that item on a firm's books under the heading of "Good Will"? How did it get there? Is it a permanent fixture? What maintains it?

Good will is exactly what its name implies. It is the value in dollars and cents placed upon the attitude of the buying public toward the service which an individual or an

## These Heating Experts won't sell you a new heater unless you need it!

ARE you sure you need a new heater? Maybe a few alterations, a little cleaning or replacing will give many more years of service to your present system.

The only way to find out is to call in an expert who sells heating service first. Not a concern that is interested only in selling you their heater *whether you need it or not*.

The dealers listed on this page won't recommend a new heater unless you actually need it. Then, and only then, they'll specify one that exactly fits your requirements. In installing a Richardson "Perfect" Warm Air Heater, they are assuring you of the finest quality the market affords at surprisingly low cost. They can arrange for convenient payments if desired. And the installation is guaranteed by the personal bond of the Richardson & Boynton Co.

Get in touch with the dealer who is nearest you now—before winter comes. Whether or not you actually buy a heater through him, he will be glad to give you the benefit of his unbiased advice.

All heaters sold by these dealers are installed in accordance with the Standard Code adopted by the National Warm Air Heating and Ventilating Association. This gives scientific assurance of an adequate heat of 70° throughout the home. In backing this Standard Code the dealer demonstrates the highest standards of workmanship.



**RICHARDSON & BOYNTON CO.**

Jackson Bldg., 220 Delaware Ave., Buffalo, N. Y.

M. F. TALLMAGE  
801 Geneva St.  
Schenectady 0982

R. C. CALKINS  
819 McKinley Plazwy  
Albany 3821

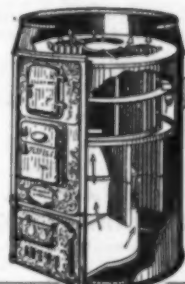
CARCO SHEET METAL  
WORKS  
541 Warren St.  
Fillmore 7978

F. J. GRIESEL & SON  
2140 Seneca St.  
Albany 0988

MARTIN SHEET METAL  
WORKS  
842 Huron Ave.  
Riverside 2674

E. F. STORCK & SON  
2195 Geneva St.  
Fillmore 2457

THOM & HUNT  
640 Breckenridge St.  
Buffalo 0732



**IF YOU NEED A NEW HEATER—MAKE IT A RICHARDSON "PERFECT"**

Another Issue of the Same Ad



entire industry gives produces.

At the present time the warm air heating industry is greatly interested in building good will. The measure of success which will be attained by the industry will depend upon the sincerity of purpose with which the problem is attacked.

It cannot be said that the entire responsibility for the building of good will for the industry is that of the manufacturer of furnaces, neither can the installers be alone charged with it. It is a joint responsibility.

At first thought it would appear that the manufacturers are in a better position than the installers to build good will for the industry. However when the question is viewed from the angle of the installer, it is seen that he and not the manufacturer is the one who comes into direct contact with the

purchaser in the final analysis.

The acts of the installer are far more subject to critical analysis by the customer of the warm air heating system than are the acts of the manufacturer.

If an installation is made that does not function properly, the installer in most instances is the one who gets the call from the customer and not the manufacturer.

Nevertheless it is as much to the manufacturer's advantage to have the industry thought well of as it is to the installer's profit to have his customers satisfied.

Many of the furnace manufacturers have instituted methods of building good will for the industry in general and their own dealers in particular. The two accompanying advertisements show how the Richardson & Boynton Co. are cooperating with their dealers to make

public sentiment more favorable to the industry.

Note how the names of representative installers in the district covered by the newspaper in which the advertisements were used are listed. These advertisements are given over almost exclusively to the task of placing the installer in the class of the expert.

If every furnace manufacturer would get together with his furnace, installers who really do install their furnace in accordance with the Standard Furnace Code, and work out similar arrangements, the time would not be far distant when the warm air heating industry would take its rightful place in public estimation.

#### R. C. Bates Has Success with Heat Squeezer Made By Himself

In our issue of October 30th, page 211, A. W. Barrett asked whether or not a device was in existence for saving the heat from the flue between the furnace and the chimney.

In reply, R. C. Bates, foreman of Bates & Son Sheet Metal Works, Murphysboro, Illinois, says that he has installed a device similar to the one which Mr. Barrett inquired about.

"I did not give the article any name," said Mr. Bates, "but it worked to the effect that it heated one room.

"The device consisted of a galvanized iron jacket made in two sections. It encircled the smoke pipe, which was 8 inches in diameter and 30 inches long, there being a 2-inch air space between the pipe and the 'heat squeezer.' The upper half had a 9-inch collar to connect the pipe to the register, which in this case was directly above at the flue end. An opening in the lower half was provided, with a slide cover, to let in the cold air from the basement.

"The heat utilizer in this case was put on a hot water plant using oil for fuel, but for plants using coal I should think the return air would have to be brought from the first floor.

## Do You Really Need a New Heater?

### Get the *Unbiased* Advice of these Heating Experts

**THINK** carefully before ordering a new heater. Can the old one still be used? Of course, if you ask a manufacturer who sells new heaters alone, the answer will be no.

But call in one of these heating experts—right in your own neighborhood. Men who know more about heaters than about selling them. They'll examine your old system thoroughly. A small repair here, a replaced part there—and it may be good for many years more.

Your dealer might decide that the best economy lies in a new Richardson "Perfect" Positive Warm Air Heater. This heater assures the maximum heat from the amount of coal used. Its special flanged construction inside gives two to three times the normal heating surface. The straight side fire pot, triangular grate bars and many other special features make it the most efficient as well as the most economical heater you can buy. It is *guaranteed by bond* and can be installed on time payments if desired.

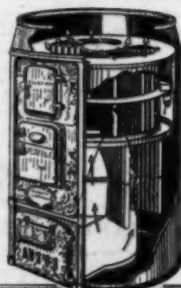
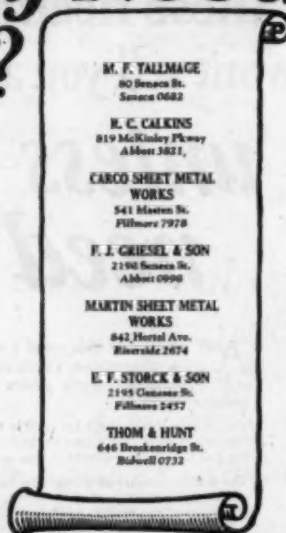
The dealers listed on this page are anxious to serve you. They are waiting for a chance to get your heating system in first-class shape, whether you need a new heater or not. Get in touch with the nearest one now.

All heaters sold by these dealers are installed in accordance with the Standard Code adopted by the National Warm Air Heating and Ventilating Association. This gives scientific assurance of an adequate heat of 70° throughout the house. In backing this Standard Code the dealer demonstrates the highest standards of workmanship.



**RICHARDSON & BOYNTON CO.**

Jackson Bldg., 220 Delaware Ave., Buffalo, N. Y.



**IF YOU NEED A NEW HEATER—MAKE IT A RICHARDSON "PERFECT"**

Advertisement Ran in Buffalo Daily

"In regard to the second floor, there is no question in mind but that the device will work properly, provided the insulation permits the riser or stack to go straight up.

"The warm air heating industry is getting better daily, and the Standard Furnace Code is largely responsible for bringing this happy result about."

#### A Few Things to Remember Regarding Chimneys

More complaints are traceable to defective or faulty chimneys than any other cause, according to the *Gas Draft*, of The Meyer Furnace Company.

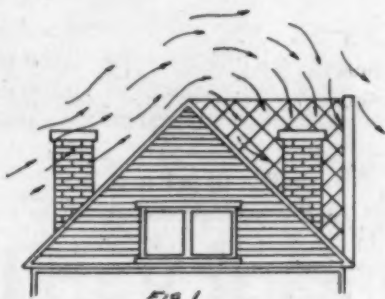


FIG 1

It should not even be necessary to mention the fact that a furnace has no draft of its own; that it is dependent entirely upon the chimney to which it is connected, to maintain a draft and to carry away the waste products of combustion.

The better the chimney flue, the better the performance of the entire heating plant.

#### A Few Things to Remember Regarding Chimneys

(1) A chimney flue for a furnace should extend from a point near the basement floor to at least two feet above the highest projection of the roof.

(2) A furnace should be connected to the chimney by a smoke pipe the full size of the collar on the furnace, as intended by the manufacturer. This is important.

(3) There should be no bends or offsets to in any way reduce the area of the flue, and the inside should be smooth and clean. Any offset or projecting mortar retards draft.

The accompanying drawings illustrate very clearly the right and

wrong way of chimney construction. Figure 1 shows why a low chimney often fails to function properly—whether it be on the straight side of the roof or in a pocket between gables, because, regardless of the direction of wind, the currents of air travel downward upon and into the chimney, retarding instead of increasing draft.

Figure 2 shows how a chimney should be constructed, or how a bad condition can be overcome, by having the chimney extend at least two feet above the top of roof, thus allowing a vacuum around the top of the chimney, creating an upward movement of the air to carry away the smoke as intended. A chimney

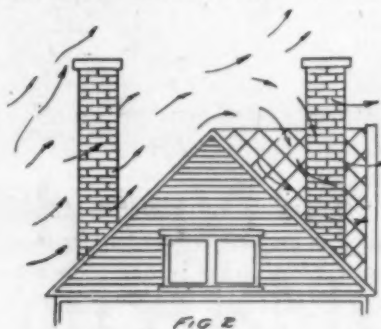


FIG 2

of ample size and of this construction serves its purpose of carrying away the waste products of combustion and at the same time maintains the required draft.

#### Annual Fire Loss in United States Reaches Staggering Figures

The full measure of the economic havoc wrought by fire in the United

States, approximating more than one billion dollars annually, was taken at the meeting of the National Fire Waste Council, sponsored by the Insurance Department of the Chamber of Commerce of the United States, in Washington on September 29.

In addition to the ordinary property losses due to fire, aggregating \$570,000,000 last year, the losses due to forest fires—of which there were 90,000 in 1925, with a tangible loss of \$28,000,000 and an estimated collateral loss of \$500,000,000—were brought before the council for discussion.

This aggregate figure of \$1,095,000,000, representing the annual fire waste in the United States, does not include the economic loss due to deaths and injuries by fire. Reports from a number of states on fire casualties were separately considered.

#### Window Show Cards Important in Retail Selling

Window show cards are one of the most important factors of retail selling. Realizing their value, a Detroit hardware store displays them at every opportunity. Here are a few of the catchy legends employed by this establishment:

"Take a tip from an old-timer; remember your wife's birthday but forget her age."

"Common sense and hard work built this store. It's a combination

Don't buy furnaces, registers, pipe or fittings until after you have investigated the Gilt Edge "Profit" line of:  
Gilt Edge Guaranteed Furnaces—Gilt Edge  
Accessories—"Champion" Pipe and Fittings  
"Rock Island" Registers

Will be in to see you. *[Signature]*  
Gilt Edge Sales Representative

Blotter Advertising Used by Travers Daniel, Jr.

that strikes twelve every time!"

"A show window is like a watch case—the real works are inside. Come in!"

"Doing the right thing made this store—and keeps on making it."

"If you don't trade here, is it our oversight—or yours?"

"Location of a store never added a penny to the value of its goods—but it often adds to the price."  
(The store is on a side street.)

## Logan & Whaley Stage Effective Hardware Booth at County Fair

*Find Big Returns in County Fair Booths That Are Properly Staged*

By W. A. MURPHEY

LOGAN & WHALEY, Marshall, East Texas, who operate one of the largest hardware stores in that section of the state, are strong for booths at their county fair, and displaying and demonstrating their merchandise.

At the outset the members of the firm get together with employees and ask suggestions as to the selection of merchandise to be displayed, designing and decorating of the booth and arrangement of the display. After giving consideration to each suggestion and centering on the best

ones, the most difficult part connected with the fair exhibit is solved.

This system of getting ideas, according to T. L. Whaley, manager, has proved very satisfactory and enables the firm to present a display sufficiently suggestive and attractive to create the desired impression for the store.

"Thousands of people visit the fair, the majority of whom are local residents, or folks in our trade territory," says Mr. Whaley, "and we would feel as if we were overlook-

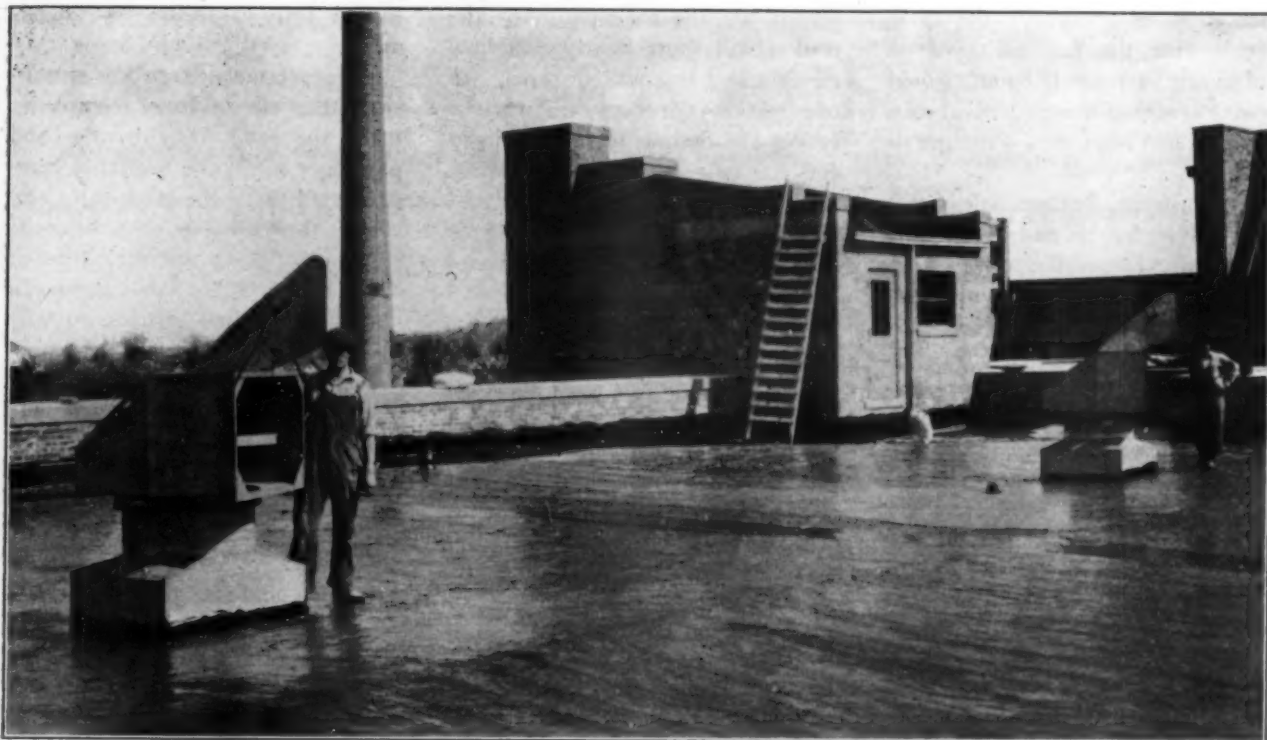
ing a grand opportunity if we were not properly represented out there among our customers and prospective customers. Along about fair time we want every man and woman connected with our business to take a personal interest in the arrangement of our fair exhibit and assist in designing and arranging the most attractive and effective exhibit that it is possible to present."

In the arrangement of these exhibits it is the policy of Logan & Whaley to present an entirely different display each year, taking the



Booth at Logan & Whaley, Marshall, East Texas





*According to the Purchasing Agent of U. S. Playing Card Company, Cincinnati, these ARMCO Ingot Iron ventilators have been giving satisfactory service for more than five years. Installed by Breese Bros. Co., Cincinnati, Ohio*

## They insist on ARMCO Ingot Iron because it works easier



**Ingot Iron**

When your customers say "ARMCO Ingot Iron," be prepared. Show them this triangle. It always identifies the purest iron made

SEVERAL years ago the U. S. Playing Card Company of Cincinnati standardized on ARMCO Ingot Iron for all sheet metal work. This was done for two very good reasons, according to Mr. Mariarty, Purchasing Agent:

1. The sheet metal department of this company demanded ARMCO Ingot Iron. Individually and collectively they said that this purer iron made possible more work with less effort—because it worked easier.
2. From the company's standpoint ARMCO Ingot Iron gave satisfactory service and kept down repair bills on account of its remarkable rust-resisting qualities.

That is but one story of the superior workability and rust-resistance of purer iron. More is told in "The History and Development of ARMCO Ingot Iron." May we send you a copy?

**The American Rolling Mill Company**  
Middletown, Ohio

Export: The ARMCO International Corp.  
Cable Address: — ARMCO, Middletown

**ARMCO** **INGOT IRON**  
TRADE MARK The Purest Iron Made

When writing mention *AMERICAN ARTISAN*—Thank you!

view that as practically the same people visit the fair each year a differently arranged booth would doubtless attract more attention than one that had been seen some previous year.

For instance, last year their display featured tools and as this line represented one of the principal departments of the business much of the space was used for the displaying of this line of merchandise. In other parts of the booth were displayed chinaware, electric lamps, aluminum ware, kitchen utensils, silver tableware and other articles taken from stock, in fact, there were exactly 572 pieces of merchandise displayed in the booth. During the previous year, 1924, the merchandise displayed consisted principally of glassware and chinaware and hardware specialties.

In the recent exhibit, fair of 1926, building material was selected for

display and the accompanying illustration will show clearly just how cleverly this line was featured. In one section are doors of various grades and designs set up on hinges for convenience in demonstrating. Locks to match were also displayed on a table near the doors.

A small house built of wall board which is carried in stock and sold by the hardware dealer, occupies the center section of the booth, while in another section is a complete assortment of paint for every purpose with a factory representative on the job to explain when, where and how to use it and get best results in the way of service.

To draw special attention to the booth and provide a little amusement for the fair visitors Logan & Whaley usually have one or other of the numerous contests in connection with their display in which a prize is offered.

should help to secure its amendment.

The government regulates and insists that the railroad companies make the same freight rates and passenger rates; the insurance companies all make the same rates and change their rates the same day; the oil companies sell their gasoline at the same prices; the labor unions all demand the same salaries, so why should the jobbers and manufacturers be considered criminals or law-breakers in case they should sell their goods at the same price, which would be only a fair profit on the cost of the transaction.

The Capper-Kelly bill is a good thing, and we should ask our congressmen and senators to support that bill.

Referring to the recent suit of the Department of Justice against the Southern Hardware Jobbers' Association and the compromise settlement agreed to, and the importance of manufacturers and merchants being allowed to make fair and reasonable profits, some change or modification in our Federal and State Anti-Trust Laws would be most desirable. They were designed really to prevent trust and monopolies, etc., etc. We jobbers certainly have no monopoly.

With this in mind, we have prepared a resolution which I now offer for your consideration, as follows:

*Resolved:* That the anti-trust laws of this country, which were designed solely to disrupt and prevent trusts and monopolies, have been, by gradual interpretation of the courts, extended so as to prevent useful co-operation among the business men of this country who are free from any purpose or possibility of monopoly. The result has been that the merchants of this country have, against their will, been driven to a state of ruthless, uneconomic and wasteful competition among themselves. This situation has resulted in enormous damage and loss to all branches of the trade and commerce of this country; and is a situation without parallel in any other civilized country.

## Why Hardware Wholesaler Must Increase His Gross Profits\*

*Says Anti-Trust Laws Prevent Useful Cooperation Among Business Men*

By D. D. PEDEN

**W**E all know that our expenses have increased; that taxes are heavy; that our employes must be paid higher salaries than they received a few years ago, so that they can live properly; foreign competition is keen, particularly in seaport cities and nearby territory.

The manufacturers are interested in seeing that the jobbers make fair profits. We must endeavor to handle the situation in each particular community for the best interests of that community and ourselves. This can be done without forming any combination, but simply by visiting with each other, knowing each other better, having lunch together so that we can talk freely and frankly among ourselves, and

by knowing our competitors better we will have more confidence in them and they in us, and the things that are worrying us and costing us so much money to do business can probably be eliminated to quite an extent.

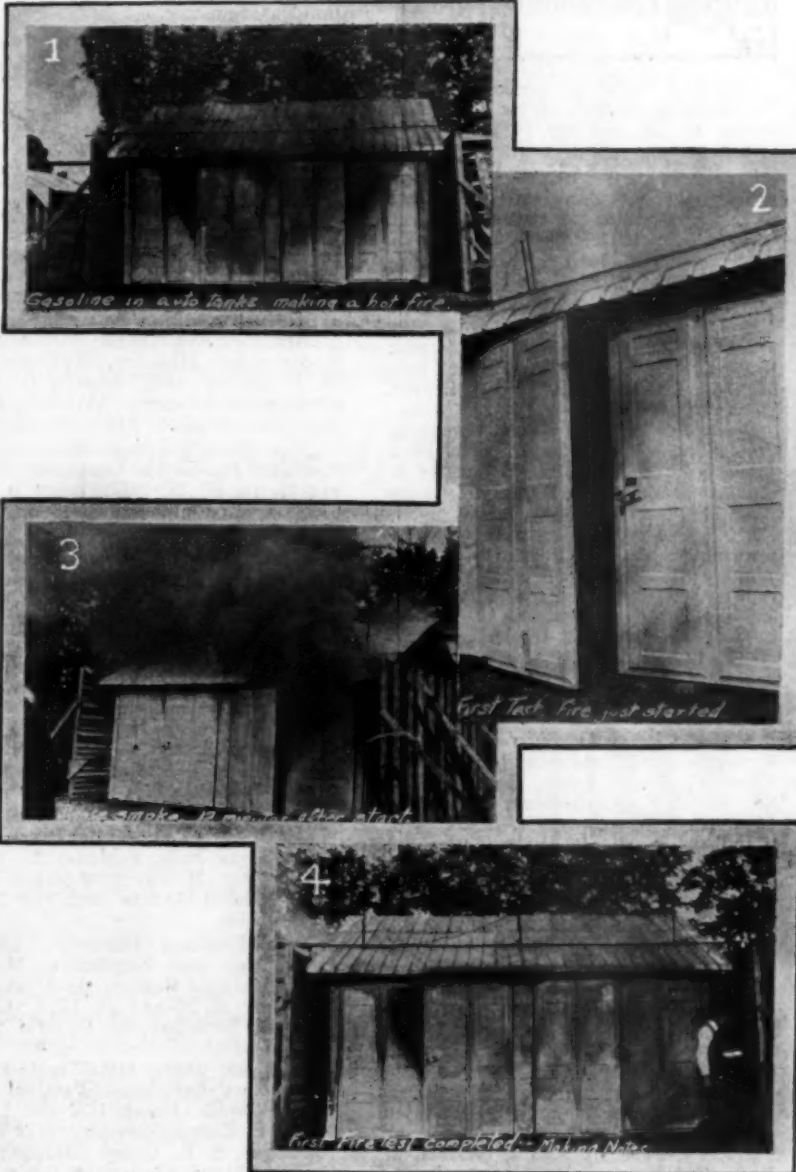
A profit on a sale is recognized by the law as being essential. The man who destroys this profit is just as much an enemy to society as the man who would ask an exorbitant profit. The whole question that this Anti-Trust Law should seek to cover, in my opinion, is: "What is a reasonable profit? On this principle the law should be based."

This, of course, is a big problem, but times have changed since the Sherman Law was enacted, and I believe it is time now that it should be amended. It, of course, will be a difficult thing to do, and not only this association, but the other trade associations over the United States

\*Address by D. D. Peden, Peden Iron & Steel Company, Houston, Texas, delivered at National Hardware Association convention, Atlantic City, New Jersey, the week of October 19.

# Fire Resistance of Sheet Steel Shown by Test

*Outstanding facts of the Sheet Steel Garage Test Conducted by the U. S. Bureau of Standards*



An all-steel commercial type garage with roof and walls of 24-gauge galvanized Sheet Steel supported on a frame of rolled steel angles of  $1\frac{1}{2}$ " x  $\frac{3}{4}$ " dimensions, has recently been tested by the Bureau of Standards at Washington with the following results:

Inside the garage was placed a large quantity of combustible materials including two automobiles with tanks filled with gasoline, a 10-ft. work bench, shelving, a barrel of waste, considerable paper and some lumber placed both on the floor and on the steel framework overhead. Enclosing the garage on three sides (see photo 1) were wooden walls at distances of 12, 18 and 24 inches respectively.

The fire was then started and the door left partly open (photo 2) to insure a high rate of combustion. For 4 hours the fire raged within, the highest temperature recorded being 1330 degrees Fahrenheit. (Photo 3.)

At the conclusion of the test, it was found that the garage had withstood the fire without buckling or breaking and was in first class condition (photo 4). The wooden surrounding walls described did not ignite for 30 minutes and then the fire was easily controlled by a hand pump.

In a second test, oil-soaked waste hung inside another Sheet Steel garage 2 feet distant did not even smolder.

Thus it will be seen that the erection of an all-steel building within one foot of a property line is entirely safe.



This trade-mark stenciled on galvanized Sheet Steel is definite insurance to the buyer that every sheet so branded is of prime quality—full weight for the gauge stamped on the sheet—never less than 26 gauge—and that the galvanizing is of the full weight and quality established by the SHEET STEEL TRADE EXTENSION COMMITTEE specification.

Embodied in the U. S. Bureau of Standards test described above is official verification of what sheet metal contractors and fabricators have preached for years—that Sheet Steel is fire-resistant and will withstand high temperatures successfully. For detailed information concerning the use of Sheet Steel for structures of greater fire-safety, address SHEET STEEL TRADE EXTENSION COMMITTEE, OLIVER BUILDING, PITTSBURGH, PA.

## SHEET STEEL

*for Strength Safety Beauty and Economy*



Former President Taft, now Chief Justice of the United States, as long ago as 1908 stated that in his opinion the time had come for an amendment of the Sherman law, "making clearer the distinction between lawful agreements, reasonably restricting trade, and those which were pernicious in effect."

The National Hardware Association of the United States, in convention assembled, does hereby endorse this highly authoritative statement and declares its belief that the anti-trust laws should be immediately amended so as to permit agreements of co-operation among merchants, which are economically useful, while continuing to forbid agreements among competitors which are likely to produce monopolies.

It is the opinion of this convention that the anti-trust legislation enacted in 1914, namely, the Clayton Act and the Federal Trade Commission Act, have done nothing to ameliorate the grievous burdens which the severity of the Sherman Law has placed upon the plain business interests of the country.

The Hardware Industry, in common with all other like industries, adheres to the universal condemnation of trusts and monopolies, but insists that neither their industry nor countless other like industries of this country can become trusts or monopolies; and that, therefore, the individual members of these great industries ought no longer to be prevented by the laws of our country from useful and sensible co-operation with each other.

**Resolved:** Further, that copies of this resolution be transmitted to the President of the United States, to the President pro-tempore of the United States Senate, to the Speaker of the House of Representatives, to the Attorney General of the United States, to the Secretary of Commerce and to the individual members of the United States Senate Committees on the Judiciary and on Interstate and Foreign Commerce and to the individual members of the House of Representatives Committees on the Judiciary and on Foreign Affairs,

and likewise to each member of the United States Senate and of the House of Representatives.



American Welding Society, Annual Fall Meeting, Buffalo, New York, November 17, 18 and 19, 1926. Carl D. Miller, secretary, Burke Electric Company, 508 Morgan Building, Buffalo.

National Warm Air Heating and Ventilating Association mid-year meeting, Urbana, Illinois, December 1 and 2, 1926, Urbana-Lincoln Hotel. Allen W. Williams, secretary, 174 East Long Street, Columbus, Ohio.

Western Warm Air Furnace & Supply Association meeting, Hotel Sherman, Chicago, December 3 and 4, 1926. John H. Hussie, 2407 Cumming Street, Omaha, Nebraska, Secretary.

West Virginia Hardware Association Convention and Exhibition, Parkersburg, January 18, 19, 20, 21, 1927. James B. Carson, secretary, 411 Mutual Home Bldg., Dayton, Ohio.

Mountain States Hardware and Implement Association Convention, Denver, January 18, 19, 20, 1927. W. O. McAllister, Secretary, P. O. Box 513, Boulder.

Texas Hardware & Implement Association Convention, Dallas, Texas, January 18 to 20, 1927. Dan Scoates, P. O. Box H, College Station, Texas, secretary.

Missouri Retail Hardware Association Convention and Exhibition, headquarters, Hotel Statler, St. Louis, January 24, 25, 26, 1927. F. X. Becherer, Secretary, 5106 North Broadway, St. Louis.

Indiana Retail Hardware Association Convention, Claypool Hotel, Indianapolis, Exhibition at Cadle Tabernacle, January 24, 25, 26, 27, 1927. G. F. Sheely, Secretary-Treasurer, 911-913 Meyer Kiser Bank Building, Indianapolis.

Oklahoma Hardware and Implement Association Convention, headquarters, Masonic Temple, Oklahoma City, January 25, 26, 27, 1927. Charles L. Unger, Secretary-Treasurer, 207-208 Bloomfield Building, Oklahoma City.

Kentucky Hardware and Implement Association convention and exhibition, Jefferson County Armory, Louisville, Kentucky, February 1 to 4, 1927. J. M. Stone, 200 Republic Building, Louisville, Kentucky, secretary and treasurer.

Wisconsin Retail Hardware Association Convention and Exhibition, headquarters, Auditorium, Milwaukee, February 1, 2, 3, 4, 1927. George W. Kornely, 1476 Green Bay Avenue, Milwaukee, Exhibit Manager. P. J. Jacobs, Secretary-Treasurer, Stevens Point.

Nebraska Retail Hardware Convention and Exposition, February 1, 2, 3, 4, 1927. Headquarters, Cornhusker Hotel, Lincoln. George H. Dietz, Secretary-Treasurer, 414-419 Little Building, Lincoln.

Iowa Retail Hardware Association Convention, headquarters, Hotel Savary, Des Moines. Exhibition at Des Moines Coliseum, February 8, 9, 10, 11, 1927. A. R. Sale, Secretary, Mason City.

Michigan Retail Hardware Convention and Exhibition, Grand Rapids, Michigan, February 8, 9, 10, 11, 1927.

Arthur J. Scott, Secretary, Marine City, Michigan. K. S. Judson, 248 Morris Avenue, Grand Rapids, Michigan, Exhibit Manager.

New York State Retail Hardware Association, Inc. Convention headquarters, Eyck Hotel, Albany. Exhibition at State Armory, February 8, 9, 10, 11, 1927. John B. Foley, Secretary, City Bank Building, Syracuse.

North Dakota Retail Hardware Association Convention and Exhibition, Grand Forks, February 8, 9, 10, 1927. C. N. Barnes, Secretary, Grand Forks.

Connecticut Hardware Association Convention, New Haven, February, 1927. Henry S. Hitchcock, Secretary, Woodbury.

Minnesota Retail Hardware Association Convention and Exposition, St. Paul, February 15 to 18, 1927. Manager and Treasurer, Charles H. Casey, Nicollet at 24th Street, Minneapolis, Minnesota.

Pennsylvania and Atlantic Seaboard Hardware Association, Philadelphia Commercial Museum, February 15, 16, 17 and 18, 1927. Sharon E. Jones, Secretary-Treasurer, Wesley Building, Philadelphia, Pennsylvania.

Ohio Hardware Association Convention and Exhibition, Columbus, February 15, 16, 17, 18, 1927. James B. Carson, secretary, 411 Mutual Home Bldg., Dayton.

Illinois Retail Hardware Association convention and exhibit, Hotel Sherman, Chicago, February 15, 16, 17, 1927. Leon D. Nish, 14 North Spring Street, Elgin, Illinois, secretary.

California Retail Hardware and Implement Association Convention and Exhibition, Sacramento Memorial Auditorium, February 15, 16, 17, 18, 1927. Hotel headquarters, The Senator. Le Roy Smith, Secretary, 112 Market Street, San Francisco.

South Dakota Retail Hardware Association Convention, headquarters, Coliseum, Sioux Falls, February 22, 23, 24, 1927. Chas. H. Casey, Manager-Treasurer, Nicollet Avenue and 34th Street, Minneapolis.

New England Hardware Dealers' Convention and Exhibition, Mechanics' Building, Boston, Massachusetts, February 22, 23 and 24, 1927. George A. Fiel, Secretary, 80 Federal Street, Boston.

Michigan Sheet Metal and Roofing Contractors' Association, Pantlind Hotel, Grand Rapids, March 1, 2 and 3, 1927. Frank E. Ederle, Secretary, 1121 Franklin Street, S. E., Grand Rapids.

Sheet Metal Contractors' Association of Pennsylvania and the Distributors' and Salesmen's Auxiliary of Pennsylvania, Hotel Bethlehem, Bethlehem, Pennsylvania, April 5, 6 and 7, 1927. W. F. Angermeyer, 7253 Frankstown Avenue, Pittsburgh, secretary. George A. Hesky, 314 Packer Avenue, Bethlehem, Chairman Convention Committee.

Texas Sheet Metal Contractors' Association, Hotel Adolphus, Dallas, Texas, April 24 and 25. Harry Stanyer, Secretary-Treasurer, 2422 Alamo Street, Dallas.

National Association of Sheet Metal Contractors, Adolphus Hotel, Dallas, Texas, April 26, 27, 28 and 29, 1927. W. C. Markle, Secretary, 850 West North Avenue, Pittsburgh, Pennsylvania.

Arkansas Retail Hardware Association Convention, Little Rock, May, 1927. L. P. Biggs, Secretary, Little Rock.

# Sell the Heaviest Steel Furnace Made

**M**ORE and more home owners want steel furnaces, but they want the durable construction of *heavy* steel. The Waterbury body is made of the heaviest steel used in furnace construction.

And, still more important, the large Waterbury radiator is built of heavier steel than is used in any other furnace made.

Your customers may not appreciate the difference in steel furnace designs but they'll see at once that the Waterbury will last many years longer, due to its *heavier* construction of seamless welded steel.



**WATERBURY**  
**SEAMLESS FURNACE**  
REG. U.S. PAT. OFF. PIPE OR PIPELESS

## Sales Rapidly Growing

Our dealers' sales of Waterburys during the first eight months of the year far exceeded the sales for the same period in 1925. Find out ALL its exclusive advantages. Mail us the coupon.

The Waterman-Waterbury Company  
1122 Jackson St. N. E. Minneapolis, Minn.

Send me at once complete details about the Waterbury and your agency proposition.

Name .....

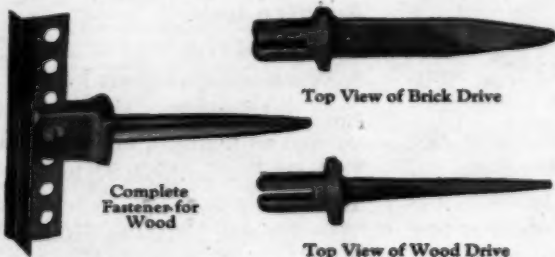
Address .....

Complete Stocks carried in  
Philadelphia, Pittsburgh, Albany and Kansas City

## OSBORN'S ADJUSTABLE CONDUCTOR FASTENER

**A**N improved adjustable conductor fastener consisting of a rust proof malleable iron drive, a rust proof bolt with nut and a galvanized perforated clip to solder on back of conductor. Also supplied with copper perforated clip.

Both the Brick and Wood Drives have an extra heavy head with slot of ample size to permit being used on 24 gauge and lighter expanding seam conductor.

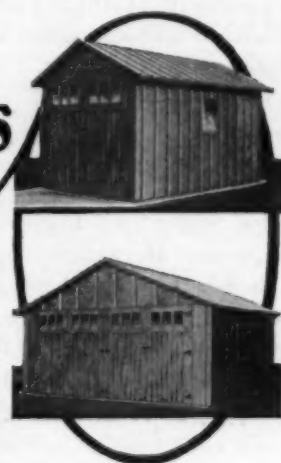


Write for sample and price

**The J. M. & L. A. OSBORN CO.**  
"Everything used in Sheet Metal Work"  
CLEVELAND  
Buffalo Warehouse - - - 64-68 Rapin Street

## BIG Profits Here

**T**HESE Buckeye Steel Garages are making big money for sheet metal men. They're popular in every section of the country. One Philadelphia man sold 96 last year. One in Albany, N. Y., sold 81.



### No Investment Required

**Y**OU have the same opportunities. You can sell just as many—perhaps more. For the sheet metal man is the logical dealer for steel garages. And no investment is required. You show your trade only blue prints, photographs and samples of material. We ship the garages to you. You install them and make a double profit—one on the garage and another on the installation.

You can't afford to pass up this chance to "cash in" on the big demand for Buckeye Steel Garages. Get all the facts about this big opportunity by writing today to

**THE THOMAS & ARMSTRONG CO.**  
Dept. M. W. London, Ohio  
Makers of Armstrong Radiator Shields

**BUCKEYE GARAGES**



# Steel Market Continues on Sound Footing— October Ingot Output Sets High Record

*Nonferrous Metals Show Little Change  
in Price—Pig Iron Market Firm*

**T**HE finished steel market continues to drift slowly downward both in point of orders and production but without signs of an accelerated rate of contraction.

Steel ingot production for all districts is averaging just under 80 per cent, with Steel corporation subsidiaries operating slightly heavier than independent interests. The heavy finished lines are maintaining their position better than some lighter products.

Sheet production has shrunk as much as 10 per cent in some districts.

Statistically, the present market continues on a sound footing. Steel ingot production in October proves to have set a new high October record with a total of 4,092,548 tons and a daily average of 157,406 tons. This is a gain of 161,873 tons over September and compares with 3,888,873 tons in October, 1925.

On the heels of the splendid showing made by both pig iron and steel ingots in October, comes the unfilled tonnage report of the United States Steel Corporation as of October 31, which is expected to show a gain of almost 200,000 tons over Sept. 30. This would bring the unfilled orders of the Steel corporation almost to 4,000,000 tons or the highest point since last April.

Heavy bookings of rails and a moderate recession in shipments in October are factors in this situation.

## **Pig Iron**

The pig iron market at Pittsburgh definitely began late in the week to show effects of higher fuel prices.

Several lots of foundry iron, some of them involving 400 tons, were sold at \$20, base, valley. One sale of 200 tons of No. 2X iron brought \$20.50, valley. A few sales of malleable, usually single carloads to 200 tons, also brought \$20, valley.

One merchant producer reports a few sales of bessemer iron at \$20, valley. Another sold 300 tons at \$20.50, which may be the minimum from now on.

No activity is noted in the market for basic iron.

Consumers are manifesting an attitude of indifference. No inquiries are appearing here, in contrast with other districts where purchasing for this quarter and first quarter is heavy.

While at Chicago buyers of northern No. 2 foundry and malleable pig iron are interested keenly in first quarter and first half contracts, it is doubtful whether the scarcity of coke in the East is sustaining any well defined buying movement aside from the steady business of the past few months.

The melt in Chicago districts is holding up to the rate of October.

Shipments thus far in November are practically equivalent to October.

At Birmingham in the pig iron market, furnace interests in Alabama have good order books for the remainder of the year.

New business now promises to absorb the remainder of the probable make and also some surplus stock.

Quotations are firm at \$20 for No. 2 foundry.

## **Copper**

Copper has sold at 13.87½ cents, Connecticut, and 14.00 cents, Midwest, but prices 5 points higher also have done in the past few days.

Buying increased recently but buyers still hold off as much as possible and drive for bargains.

Interest is mostly in December shipment but some is shown both earlier and later positions.

## **Zinc**

Prime western zinc has eased a little farther, with business the past

few days mostly at 7.15 cents to 7.20 cents, East St. Louis the latter being mostly prompt at a premium of 2½ points.

The week's business has been fair, and a good proportion of it for December. High grade is strong and unchanged at 9.25 cents to 9.50 cents.

## **Tin**

Tin has been coming back since its break about a week ago but sales have been lighter since the rise started.

There is nothing new in the situation but wide fluctuations are natural as the market is sensitive, having smaller demand but yet not enough of a let-up to cause real weakness.

Supplies still are tight, as shown by the big premium of 1 cent on prompt.

## **Lead**

The lead market has been fairly steady since dropping to 8.00 cents, New York, a week ago and the East St. Louis market looks firmer after easiness following the eastern cut. Sales in the Midwest have been large and for November.

## **Solder**

Chicago warehouse prices on solder are as follows: Warranted 50-50, \$43.25; commercial 45-55, \$40.25, and plumbers', \$37.25, all per 100 pounds.

## **Old Metals**

Wholesale quotations in the Chicago district, which should be considered as nominal, are as follows: Old steel axles, \$16.50 to \$17.00; old iron axles, \$22.00 to \$22.50; steel springs, \$16.00 to \$16.50; No. 1 wrought iron, \$12.25 to \$12.75; No. 1 cast, \$15.50 to \$16.00, all per net tons. Prices for non-ferrous metals are quoted as follows, per pound: Light copper, 9 cents; zinc, 5 cents, and cast aluminum, 18 cents.



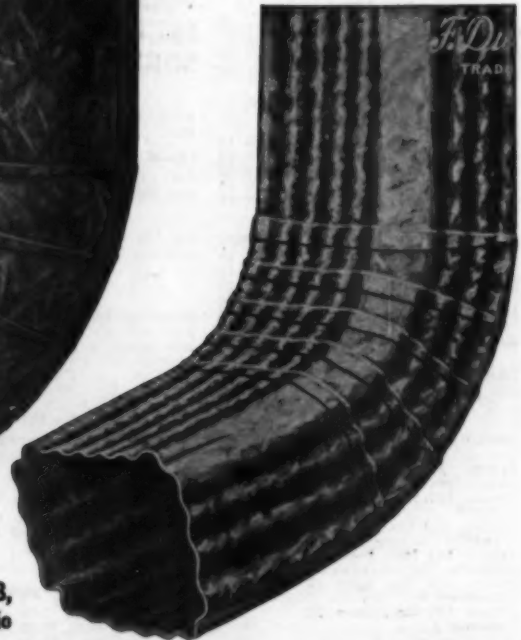
**INSIST UPON  
DIECKMANN  
ELBOWS AND SHOES**



*F. Dieckmann*  
TRADE MARK

TRADE MARK

**ALL JOBBERS HAVE  
THEM OR CAN GET  
THEM FOR YOU**



**The Ferdinand Dieckmann Co.** P. O. Station B,  
Cincinnati, Ohio



*Painted Shingles—also two  
kinds of Galvanized Shingles*

**A**LL Cortright Metal Shingles come in four patterns. The painted shingles can be had either red or green. Cortright Hand Dipped Galvanized Shingles are stamped from prime roofing tin and dipped separately by hand in molten zinc. Our other shingles are stamped from sheets already galvanized.

**CORTRIGHT METAL ROOFING CO.**  
50 N. 23rd Street, Philadelphia  
526 S. Clark Street, Chicago

**CORTRIGHT METAL SHINGLES**

**The NEW IMPROVED "STANDARD"**  
**Rotable Ventilator**



*Patents pending*

This favorite cone-shaped ventilator is now improved in several important points.

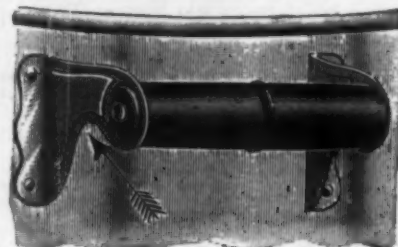
The weight of the ventilator body is now carried on a concave thrust bearing nested in the apex of the conical body. This bearing turns upon the pivot point of the stationary center spindle.

The bronze Guide Bushings are now made of non-corrosive bronze which minimizes friction and any tendency to screech when body is rotating.

*There are other new features. Write today for new catalog and price list.*

**STANDARD VENTILATOR CO., LEWISBURG, PA.**

## KEYSTONE BOILER HANDLES



**WE** make a complete line of Boiler Handles.

Also handles for Boiler Covers.

Cut shows No. 40 style.

Let us send you samples.

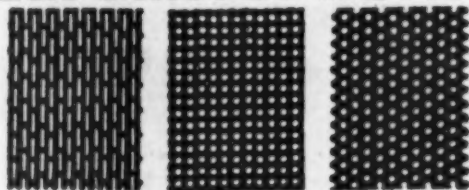
*Complete catalog on request.*

## BERGER BROS. CO.

229 to 237 ARCH STREET PHILADELPHIA, PA.

Warerooms and Factory: 100 to 114 Broad Street  
Manufacturers of "Quaker City" line of Miter, Ends, Caps and Outlets

## PERFORATED METALS



All Sizes and Shapes of Holes  
In Steel, Zinc, Brass, Copper, Tinplate, etc.  
For All Screening, Ventilating and Draining  
**EVERYTHING IN PERFORATING METAL**

**THE HARRINGTON & KING PERFORATING CO.**

5649 FILLMORE ST.-CHICAGO, ILL. U. S. A.  
NEW YORK OFFICE: 114 LIBERTY ST.

# Chicago Warehouse Metal and Furnace Supply Prices

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

## METALS

### FIG IRON

Chicago Fdy., No. 2.....	\$21 00
Southern Fdy., No. 2.....	26 01
Lake Superior Charcoal.....	27 04
Malleable .....	31 00

### FIRST QUALITY BRIGHT

#### TIN PLATES

IC 20x28 112 sheets.....	\$25 10
IX 20x28.....	29 40
IXX 20x28 56 sheets.....	16 30
IXXX 20x28.....	17 55
IXXXX 20x28.....	18 95

#### TERNE PLATES

IC 20x28, 40-lb. 112 sheets.....	\$27 90
IX 20x28, 40-lb. 112 sheets.....	30 90
IC 20x28, 35-lb. 112 sheets.....	32 20
IX 20x28, 35-lb. 112 sheets.....	35 20
IC 20x28, 30-lb. 112 sheets.....	30 25
IX 20x28, 30-lb. 112 sheets.....	33 00
IC 20x28, 15-lb. 112 sheets.....	18 55

### "ARMCO" INGOT IRON PLATES

No. 8 ga. up to and including	
1/4 in.—100 lbs.....	\$4 55

### COKE PLATES

Cokes, 80 lbs., base, 20x28.....	\$12 60
Cokes, 90 lbs., base, 20x28.....	12 80
Cokes, 100 lbs., base, 20x28.....	13 00
Cokes, 107 lbs., base, 1c	
20x28.....	13 30
Cokes, 135 lbs., base, 1c	
20x28.....	15 70
Cokes, 155 lbs., base, 56	
sheets.....	8 70
Cokes, 175 lbs., base, 56	
sheets.....	9 55
Cokes, 195 lbs., base, 56	
sheets.....	10 40

### BLUE ANNEALED SHEETS

Base 10 ga.....per 100 lbs.	\$2 30
"Armco" 10 ga.....per 100 lbs.	4 00

### ONE PASS COLD ROLLED

#### BLACK

No. 18-20.....per 100 lbs.	\$2 75
No. 22.....per 100 lbs.	3 90
No. 24.....per 100 lbs.	3 95
No. 26.....per 100 lbs.	4 05
No. 27.....per 100 lbs.	4 10
No. 28.....per 100 lbs.	4 30
No. 29.....per 100 lbs.	4 35
No. 30.....per 100 lbs.	4 45

### "ARMCO" GALVANIZED

"Armco" 24.....per 100 lbs.	\$5 35
-----------------------------	--------

#### GALVANIZED

No. 16.....per 100 lbs.	4 30
No. 18.....per 100 lbs.	4 45
No. 20.....per 100 lbs.	4 50
No. 22.....per 100 lbs.	4 65
No. 24.....per 100 lbs.	4 80
No. 26.....per 100 lbs.	5 05
No. 27.....per 100 lbs.	5 15
No. 28.....per 100 lbs.	5 30
No. 30.....per 100 lbs.	5 70

#### BAR SOLDER

Warranted	
50-50.....per 100 lbs.	44 00

#### Commercial

45-55.....per 100 lbs.	41 00
Plumbers.....per 100 lbs.	38 00

### ZINC

In Slabs.....	\$3 80
---------------	--------

#### SHEET ZINC

Cash Lots (600 lbs.).....	\$13 75
Sheet Lots.....	14 75

### BRASS

Sheets, Chicago base.....	18 1/2c
Mill base.....	18 1/2c
Tubing, brazed base.....	27 1/2c
Wire, base.....	19 1/2c
Rods, base.....	16 1/2c

### COPPER

Sheets, Chicago base.....	22 1/2c
Mill base.....	21 1/2c
Tubing, seamless base.....	25 1/2c
Wire, No. 9 B & S Ga.....	19c
Wire, No. 10 B & S Ga.....	19 1/2c
Wire, No. 11 B & S Ga.....	19 1/2c
Wire, No. 8, B & S Ga. and	
heavier.....	18 1/2c

## HARDWARE, SHEET METAL SUPPLIES, WARM AIR FURNACE FITTINGS AND ACCESSORIES.

### LEAD

American Pig.....	\$5 30
Bar.....	9 80

### Sheet

Full Colls.....per 100 lbs.	14 00
Cut Colls.....per 100 lbs.	14 25

### TIN

Pig tin.....per 100 lbs.	77 00
Bar tin.....per 100 lbs.	78 00

### ASBESTOS

Paper up to 1/16.....	6c per lb.
Roll board.....	5 1/4c per lb.
Mill board 3/32 to 1/2.....	6c per lb.
Corrugated Paper (350	
sq. ft. to roll).....	\$6.00 per roll

### BRUSHES

Hot Air Pipe Cleaning	
Bristle, with handle, each.....	\$0 35
Flue Cleaning	
Steel only, each.....	1 25

### BURRS

Coppers Burrs only.....	40%
-------------------------	-----

### CEMENT, FURNACE

American Seal, 5-lb. cans, net	\$ 40
American Seal, 10-lb. cans, net	30
American Seal, 35-lb. cans, net	2 00
Pecora.....per 100 lbs.	7 51

### CHIMNEY TOPS

Iwan's Complete Rev. &	
Vent.....	30%
Iwan's Iron Mountain only.....	35%
Standard.....	30 to 40%

### CLINKER TONGS

Front Rank, each.....	\$0 75
Per doz.....	8 40

### CLIPS

Damper	
Acme, with tail pieces,	
per doz.....	\$1 25
Non Rivet tail pieces,	
per doz.....	25

### COPPERS—Soldering

Pointed Rounding	
3 lb. and heavier.....per lb.	40c
2 1/2 lb. ....per lb.	45c
2 lb. ....per lb.	45c
1 1/2 lb. ....per lb.	55c
1 lb. ....per lb.	55c

### CORNICE BRACKES

Chicago Steel Bending	
No. 1 to 6B.....	Net

### CUT-OFFS

Kuehn's Korrekt Kutoffs:	
Galv., plain, round or cor. rd.	
standard gauge.....	40%
26 gauge.....	30%

### DAMPERS

"Yankee" Hot Air	
7 inch, each 25c, doz.....	\$1 75
8 inch, each 35c, doz.....	2 40
9 inch, each 35c, doz.....	2 75
10 inch, each 35c, doz.....	3 00

### Smoke Pipe

7 inch, each.....	\$0 35
8 inch, each.....	40
9 inch, each.....	50
10 inch, each.....	60
12 inch, each.....	90

### Reversible Check

8 inch, each.....	\$1 50
9 inch, each.....	1 75

### DIGGERS

#### Foot Holes

Iwan's Split Handle	
(Eureka)	
4-ft. Handle.....per doz.	\$14 00
7-ft. Handle.....per doz.	36 00

Iwan's Hercules pattern,	
per doz.....	14 90

### EAVER TROUGH

Galv. Crimpedga, crated.....	75 & 5%
------------------------------	---------

### ELBOWS

#### Conductor Pipe Milcor.

Galv., plain or corrugated,	
round flat Crimp.....	60%
28 Gauge.....	45%
26 Gauge.....	45%
24 Gauge.....	15%

#### Square Corrugated

No. 28 Gauge.....	50%
26 Gauge.....	35%

#### Partice Elbows

Standard Gauge Conductor Pipe,	
plain or corrugated.....	70 & 5%
Not nested.....	70 & 5%
nested solid.....	70 & 5%

### ELBOWS—Stove Pipe

1-piece Corrugated, Uniform Blue	
"Milcor" No. 28 gauge.....	Dos.
5-inch.....	\$1 15
6-inch.....	1 25
7-inch.....	1 75

#### Special Corrugated

6-inch.....	\$1 00
7-inch.....	1 60

#### Adjustable—Uniform Blue

"Milcor" No. 28 Gauge, Uniform	
Blue.....	
5-inch.....	\$1 65
6-inch.....	1 75
7-inch.....	2 40

### WOOD FACES—50% off list.

736-6-12 1/4 (100 rods).....	\$28 65
1948-6-14 1/4 (100 rods).....	43 65

### FILES AND RASPS

Heller's (American).....	50-100%
American.....	50-100%
Arade.....	50%
Black Diamond.....	40-10-5%
Eagle.....	50%
Great Western.....	50%
Kearney & Foot.....	50%
McClellan.....	50%
Nicholson.....	50%
Simonds.....	50%

### FIRE POTS

Otto Berns Co.	
East of west boundary line of	
Province of Manitoba, Canada,	
No. Dakota, So. Dakota, Nebras-	
ka, Kansas, Oklahoma, Amaril-	
lo, San Angelo and Laredo,	
Texas.....	65%
West of above boundry line	
.....	61%

### Clayton & Lambert's

East of west boundary line of	
Province of Manitoba, Canada,	
No. Dakota, So. Dakota, Nebras-	
ka, Kansas, Oklahoma, Amaril-	
lo, San Angelo and Laredo,	
Texas.....	65%
West of above boundary line	
.....	45%

### Geo. W. Diener Mfg. Co.

No. 63 Gasolene Torch, 1	
qt.....	\$ 5 55
No. 6250, Kerosene, or	
Gasolene Torch, 1 qt.....	7 50
No. 10 Tinner's Furn.	
Square tank, 1 gal.....	13 00
No. 15 Tinner's Furn.	
Round tank, 1 gal.....	13 00
No. 21 Gas Soldering Fur-	
nace.....	2 00
No. 110 Automatic Gas	
Soldering Furnace.....	10 50

### Double Blast Mfg. Co.

Gasolene, Nos. 25 and 35.....	40%
-------------------------------	-----

### Quick Meal Stove Co.

Vesuvius, F. O. B. St. Louis 30%	
(Extra Discot. for large	
quantities)	

### Chas. A. Hones, Inc.

Busser No. 1.....	\$ 9 00
Busser No. 3.....	12 00
Busser No. 23.....	15 00
Busser No. 42.....	15 00
Busser No. 43.....	15 00

### GALVANIZED WARE

Falls (Galv. after made),	
10-qt.....	\$2 12
Tubs (Galv. after made).	
No. 1.....	6 00
No. 2.....	6 50

### GLASS

Single Strength, A, 25-in.	
brackets.....	55%
Single Strength, A, 24 to 40-	
in. bracket.....	52%
Single Strength A, all other	
brackets.....	51%
Double Strength A, all sizes.....	52%

### HANGERS

Conductor Pipe	
Milcor Perfection Wire.....	34%
Eaves Trough	
Milcor Bellpoe Wire.....	15%
Milcor Triplex Wire.....	10%
Milcor Milwaukee Extension 10%	
Milcor Steel (galv. after	
forming) List plus.....	12 1/2%
Milcor Selfcock E. T. Wire,	
List plus.....	50%

### HOOCS

Box	
V. & B. No. 1, each.....	\$0 25

### Conductor

Milcor	
"Direct Drive" Wrought	
Iron for wood or brick.....	15%

### May

V. & B. No. 1, each.....	\$0 25
--------------------------	--------

### HUMIDIFIERS

"Frost-Blank" Automatic	
In single lots.....	50%
In lots of 10 or more.....	50-55%
In lots of 25 or more.....	50-10%
Vapor pans, etc., each.....	50%

### LIFTERS

Stove Cover	
Coppered.....per gro.	\$0 90
Alaska.....per gro.	4 75

### MALLETS

Tinners	
Hickory.....per doz.	\$2 25

### MITRES

Galvanized steel mitres, and	
caps, and pieces, outlets.....	30%
Milcor	
Galv. one piece stamped.....	40%

### NAILS

Cut Steel.....	\$4 25
Cut Iron.....	4 25
Wire	
Common.....	2 05
Cement Coated.....	5 05
(Continued on page 96)	

## ART METAL CEILINGS and SIDE WALLS

*The kind that sell and satisfy*

WE have just recently issued a new 108-page book of new designs—patterns that are up-to-date and good looking. We use only high grade metals and our machinery is the latest and best, producing clearly stamped figures.

Friedley-Voshardt Metal Ceilings are easy to erect—they fit and stay put—they sell and satisfy.

If you have not received a copy of our new catalog write for your copy today.

ZINC—COPPER—LEAD  
STAMPINGS

*We are specialists in the field of Sheet Metal Architectural Ornaments. Write for our catalog.*

### Friedley-Voshardt Co.

Office: 733-737 S. Halsted St. Factory: 761-777 Mather Street  
CHICAGO, ILLINOIS

## CHICAGO STEEL SLITTING SHEAR

LIGHT—POWERFUL  
DURABLE



Capacity 10 gauge sheets  
Any Length or Width  
Flat Bars 3/16x2"  
Weight 22 pounds

Price \$12.50 Net  
F. O. B. Chicago

Made of pressed steel and equipped with hold-down. Blades of highest grade crucible steel. Most indispensable high grade shears made. Equal to other shears selling at over twice the price. **ORDER YOURS TODAY.**

DREIS & KRUMP MFG. CO., 7404 Loomis St., Chicago

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DESIGNED to effectively remove impure air, fumes, etc., from Factories, Garages, Schools, etc. Made in all sizes—Metal or Glass Top. Write for catalog.

ROYAL VENTILATOR CO., 415 Locust Street, Philadelphia, Pa.

## Plecker's Galvanized Eave Trough and Corrugated Expanding Conductors

Made of  
Keystone  
Copper Bearing  
Steel



Costs no more  
Lasts longer  
Therefore  
Cheaper

CLARK-SMITH HARDWARE CO.

PEORIA, ILLINOIS



Send for catalog today

## VIKING SHEAR

Compound LEVER Handle—Removable Blades

A child can work them

VIKING SHEAR CO., Erie, Pa.

## Memorial Monuments

Write for Prices and  
Illustrations

### Gerock Bros. Mfg. Co.

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and  
STATUARY

1252 So. Vandeventer Ave.  
St. Louis, Mo., U. S. A.



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The home should be properly ventilated—few of them are. Here is a sales opportunity often overlooked by the average Sheet Metal Worker, but one which offers a lucrative business to those who take advantage of it.



*The 12-Cylinder Ventilator  
Used in Every State  
in the Union.*

SPECIFY ÆOLUS  
VENTILATORS

### Æolus-Dickinson Co.

Vent. Makers Since 1888  
3333-53 South Artesian Avenue  
CHICAGO  
Phone: Lafayette 1862-1863

## OUR NEW IMPERIAL PUNCH NO. 8



Large throat clearance. Capacity 3/4" hole thru 3/4" iron. Operating handles will not become disengaged. Roller Bearing. No cams to wear out. Just right for standing seams or sky-light work. We furnish base for bench purposes. *Write for Prices*

### Whitney Metal Tool Company

93 Forbes  
Street

Ball Bearing Punches  
Rockford, Illinois, U. S. A.

93 Forbes  
Street



## ADVERTISERS' INDEX

The dash (—) indicates that the advertisement runs on a regular schedule but does not appear in this issue.

A		L	
Aeolus Dickinson Co. ....	95	Lalanc & Grosjean Mfg. Co. ....	99
American Foundry & Furnace Co. ....	—	Lamneck & Co., W. E. ....	—
American Furnace Co. ....	—	Langenberg Mfg. Co. ....	—
American Rolling Mill Co. ....	87	Lennox Furnace Co. ....	—
American Steel & Wire Co. ....	99	Liberty Foundry Co. ....	—
American Tube & Stamping Co. ....	—	Lupton's Sons Co., David. ....	—
American Wood Register Co. ....	—	M	
Arex Co. ....	97	Marshalltown Heater Co. ....	56
B		Marshalltown Mfg. Co. ....	—
Beh and Co. ....	61	May-Fieberger Co. ....	—
Berger Bros. Co. ....	93	Merchant & Evans Co. ....	—
Berger Co., L. D. ....	—	Meyer Bros. Co., F., The. ....	58
Berns Co., Otto ....	—	Meyer Furnace Co., The. ....	58
Bertsch & Co. ....	99	Milwaukee Corr. Co., Back Cover	—
Brillion Furnace Co. ....	—	Monitor Furnace Co. ....	—
Burgess Soldering Furnace Co. ....	—	Mt. Vernon Furn. & Mfg. Co. ....	57
C		Mueller Furnace Co., L. J. ....	54
Chicago Elbow Machine Co. ....	—	N	
Chicago Furnace Supply Co. ....	—	National Enameling & Stamp- ing Co. ....	—
Chicago Solder Co. ....	—	New Jersey Zinc Sales Co., The	—
Clark-Smith Hardware Co. ....	95	Northwestern Stove Repair Co. ....	61
Clayton & Lambert Mfg. Co. ....	—	O	
Cleveland & Buffalo Transit Co.	—	Oakland Fdy. Co. ....	—
Cleveland Castings Pattern Co. ....	60	Osborn Co., The J. M. & L. A. ....	91
Coes Wrench Co. ....	99	P	
Connors Paint Co., Wm. ....	—	Parker-Kalon Corp. ....	—
Cortright Metal Roofing Co. ....	93	Peck, H. E. ....	102
Copper & Brass Research As- sociation ....	—	Peck, Stow & Wilcox Co. ....	—
D		Pecora Paint Co. ....	—
Davis and Co., Inc., C. S. ....	58	Peninsular Stove Co. ....	—
Diamond Mfg. Co. ....	—	Polk, R. L. ....	—
Dieckmann Co., Ferdinand. ....	93	Q	
Diener Mfg. Co. ....	97	Quaker Mfg. Co. ....	59
Double Blast Mfg. Co. ....	97	Quick Meal Stove Co. ....	97
Double-Duty Mfg. Co. ....	—	Quincy Pattern Co. ....	60
Dreis & Krump Mfg. Co. ....	95-97	R	
Dunning, Inc., E. C. ....	—	Robinson, A. H., Co. ....	61
E		Robinson Furnace Co. ....	60
Eaglesfield Ventilator Co. ....	—	Roemer Heating Co., J. ....	61
Excelsior Steel Furn. Co. ....	—	Rock Island Register Co. ....	59
F		Ross-Gould Co. ....	97
Fanner Mfg. Co. ....	—	Royal Ventilating Co. ....	95
Floral City Heater Co. ....	—	Rybolt Heater Co. ....	—
Forest City Fdy. & Mfg. Co. ....	56	S	
Fort Shelby Hotel ....	—	Sall Mountain Co. ....	—
Friedley-Voshardt Co. ....	95	Schwab & Sons, R. J. ....	—
Friedman & Peck. ....	—	Security Stove & Mfg. Co. ....	55
G		Sheet Steel Trade Ex. Comm. ....	89
Gerock Bros. Mfg. Co. ....	95	Special Chemicals Co. ....	—
Granite City Steel Works. ....	—	Standard Fdy. & Mfg. Co. ....	—
Gray & Dudley Co. ....	—	Standard Furn. & Supply Co. ....	—
Great Lakes Supply Co. ....	—	Standard Ventilator Co. ....	93
H		Stearns Register Co. ....	62
Hall-Neal Co. ....	—	St. Louis Heating Co. ....	57
Harrington & King Perf. Co. ....	93	St. Louis Tech. Inst. ....	—
Hart & Cooley Co. ....	—	Sturtevant Co. ....	60
Henry Furnace & Fdy. Co. ....	—	Success Heater Mfg. Co. ....	—
Hero Furnace Co. ....	—	T	
Hess-Snyder Co. ....	—	Taylor Co., N. & G. ....	—
Hessler Co., H. E. ....	—	Technical Products Co. ....	102
Homer Furnace Co. ....	—	Tuttle & Bailey Mfg. Co. ....	63
Hopson Co., W. C. ....	—	Thatcher Co. ....	65
Howes Co., R. M. ....	—	Thomas & Armstrong Co. ....	91
I		U	
Independent Register & Mfg. Co. ....	61	Unishear Co., The. Inc. ....	—
Inland Steel Co. ....	—	Utica Heater Co. ....	Front Cover
International Heater Co. ....	66	V	
K		Vedder Pattern Works. ....	60
Kernchen Co. ....	—	Viking Shear Co. ....	95
Kirk-Latty Co. ....	60	W	
Kruse Co. ....	59	Warm Air Furnace Fan Co. ....	—
		Walworth Run Fdy. Co. ....	—
		Watermann-Waterbury Co. ....	91
		Western Steel Products Co. ....	—
		Wheeling Corr. Co. ....	—
		Whitney Mfg. Co., W. A. ....	—
		Whitney Metal Tool Co. ....	95
		Williamson Heater Co. ....	—
		Wise Furnace Co. ....	—
		Z	
		Ziener Aluminum Solder Co. ....	—

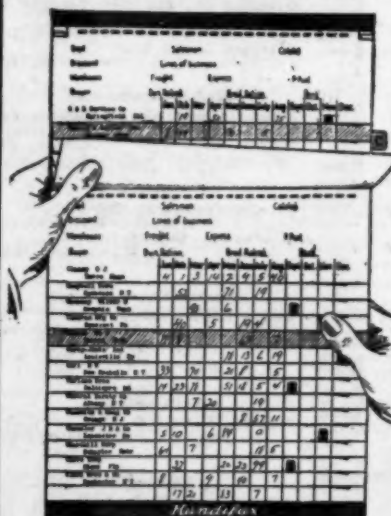
## Markets—Continued from page 94

NETTING, POULTRY		ROOFING	
Galvanized before weav. ....	57½-58	Best grade, slate surf. prep'd	\$2 30
Galvanized after weaving. ....	53½-54	Best talc surfaced. ....	2 65
		Medium talc surfaced. ....	2 90
		Light talc surfaced. ....	1 30
		Red Rosin Sheeting, per ton	57 00
PASTE		SCREWS	
Asbestos Dry Paste:		Sheet Metal	
200-lb. barrel ....	\$18 00	No. 7, ½x¼, per gross. ....	\$9 50
100-lb. barrel ....	75	No. 10, ¾x3/16, per gross	63
35-lb. pail ....	50	No. 34, ¾x¼, per gross. ....	39
10-lb. bag ....	10		
5-lb. bag ....	60	SHEARS, TINNERS' & MACHINISTS	
2½-lb. cartons ....	35	Viking ....	\$32 00
PIPE		Lennox Throatless	
Conductor		No. 18 ....	35%
Cor. Rd., Plain Rd. or Sq.		Shear blades ....	10%
"Interlock" Galvanized		(f. o. b. Marshalltown, Iowa.)	
Crated and nested (all gauges) ....	75-2¼%	SHIELDS, REGISTER	
Crated and not nested (all gauges) ....	70-15%	No. 1 "Gem," floor. ....	\$12 00 doz.
"Milcor" "Tittlock" Uniform		No. 2 "Gem," wall. ....	6 00 doz.
Blue Stove		SHOES	
25 gauge, 5 inch U. C.	11 00	Milcor	
25 gauge, 6 inch U. C.	12 00	Galv. 28 Gauge, Plain or	
30 gauge, 7 inch U. C.	14 00	corr. round flat crimp. ....	60%
30 gauge, 5 inch U. C.	10 00	26 gauge round flat crimp. ....	45%
30 gauge, 4 inch U. C.	10 50	24 gauge round flat crimp. ....	15%
30 gauge, 7 inch U. C.	12 00	SNIPS, TINNERS'	
T-Joint Made up		Clover Leaf ....	40 & 10%
6-inch, 28 ga. ....	per 100 32 50	National ....	40 & 10%
		Star ....	50%
		Milcor ....	Net
FURNACE PIPE		SQUARES	
Double Wall Pipe and		Steel and Iron ....	Net
Pipe Fittings ....	40%	(Add for bluing, \$3 per doz. net.)	
Single Wall Pipe, Round		Mitre ....	Net
Iron Pipe Galvanized. ....	40%	Try ....	Net
Galvanized and Black		Try and Bevel. ....	Net
Fittings ....	40%	Try and Mitre. ....	Net
Milcor Galvanized		Fox's ....	per doz. \$6 00
Pipe and Fittings. ....	40%	Winterbottom's ....	10%
LEAD		STOPPERS, FLUE	
Per 100 lbs. ....	\$12 50	Common ....	per doz. \$1 10
		Gem, No. 1. ....	per doz. 1 10
		Gem, flat, No. 3. ....	per doz. 1 00
POKERS, STOVE		VENTILATORS	
Wrt Steel, str't or bent. ....	per doz. \$9 75	Standard ....	30 to 40%
Nickel Plated, coil handles. ....	per doz. 1 10	WIRE	
		Plain annealed wire, No. 8	
POKERS, FURNACE		per 100 lbs. ....	\$3 00
Each ....	\$0 50	Galvanized barb wire, per	
		100 lbs. ....	3 30
PULLEYS		Wire cloth—Black painted,	
Furnace Tackle. ....	per doz. \$9 00	12-mesh, per 100 sq. ft. ....	1 75
per gross 6 00		Cattle Wire—galvanized	
Furnace Screw (encased) ....	per doz. 75	catch weight spool, per	
		100 lbs. ....	3 85
PUTTY		Galvanized Hog Wire, 80 rod	
Commercial Putty, 100-lb.		spool, per spool ....	3 34
kits ....	\$3 40	Galvanized plain wire, No. 3,	
		per 100 lbs. ....	3 50
QUADRANTS		Stove Pipe, per stone. ....	1 10
Malleable Iron Damper. ....	10%	WRINGERS	
REDUCERS—Oval Stove Pipe		No. 790, Guarantee per doz. ....	\$55 00
Per doz. ....	Per doz. ....	No. 770, Bicycle per doz. ....	52 50
7-8, 1 doz. in carton. ....	\$3 00	No. 670, Domestic per doz. ....	48 50
BASEBOARD REGISTERS		No. 110, Brighton per doz. ....	48 50
Excelsior ....	50%	No. 750, Guarantee per doz. ....	55 50
FLOOR REGISTERS AND BORDERS		No. 740, Bicycle per doz. ....	52 50
Cast Iron and Semi-Steel. ....	20%	No. 22, Pioneer per doz. ....	39 00
Steel and Semi-Steel. ....	40%	No. 2, Superb per doz. ....	29 00
In lots less than 50 ....	33¼%		
Baseboard ....	40%		
In lots less than 50 ....	33¼%		
Adjustable Ceiling			
Ventilators ....	40%		
Register Faces—Cast and Steel			
Japanned, Bronzed and			
Plated, 4x6 to 14x14 ....	40%		
In lots less than 50 ....	33¼%		
Large Register Faces—Cast,			
14x14 to 32x43 ....	50%		
Large Register Faces—Steel,			
14x14 to 32x43 ....	65%		
In lots less than 50 ....	60%		
RIDGE ROLL			
Milcor			
Galv., Plain Ridge Roll,			
½"ld ....	75-10-5%		
Galv., Plain Ridge Roll,			
crated ....	75-10%		
Glebe Finials for Ridge Roll. ....	60%		

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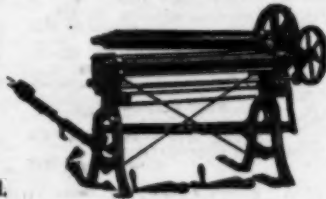
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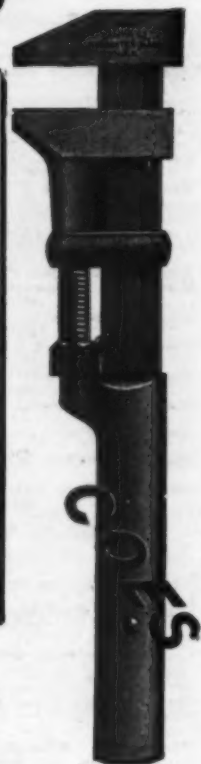
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# BUYERS' DIRECTORY

**Posts—Steel Fence.**  
American Steel & Wire Co.,  
Chicago, Ill.

**Punches.**  
Bertsch & Co.,  
Cambridge City, Ind.  
Parker-Kalon Corp.,  
New York, N. Y.  
Peck, Stow & Wilcox Co.,  
Southington, Conn.  
Whitney Mfg. Co., W. A.,  
Rockford, Ill.  
Whitney Metal Tool Co.,  
Rockford, Ill.

**Punches—Combination Bench and Hand.**  
Parker-Kalon Corp.,  
New York, N. Y.  
Whitney Metal Tool Co.,  
Rockford, Ill.  
Whitney Mfg. Co., W. A.,  
Rockford, Ill.

**Punches—Hand.**  
Whitney Metal Tool Co.,  
Rockford, Ill.  
Whitney Mfg. Co., W. A.,  
Rockford, Ill.

**Patty—Stove.**  
Connors Paint Mfg. Co., Wm.,  
Troy, N. Y.  
Pecora Paint Co.,  
Philadelphia, Pa.

**Quadrants—Damper.**  
Parker-Kalon Corp.,  
New York, N. Y.

**Radiator Cabinets.**  
Tuttle & Bailey Mfg. Co.,  
Chicago, Ill.

**Range—Combination Gas & Coal.**  
Quick Meal Stove Co.,  
St. Louis, Mo.  
Thatcher Co.,  
Newark, N. J.

**Range—Gas.**  
Quick Meal Stove Co.,  
St. Louis, Mo.  
Gray & Dudley Co.,  
Nashville, Tenn.

**Registers—Warm Air.**  
American Wood Register Co.,  
Plymouth, Ind.  
Chicago Furnace Supply Co.,  
Chicago, Ill.  
Eaglesfield Ventilator Co.,  
Indianapolis, Ind.  
Excelstor Steel Furnace Co.,  
Chicago, Ill.  
Hart & Cooley Co.,  
New Britain, Conn.  
Henry Furnace & Fdy. Co.,  
Cleveland, Ohio  
Independent Register & Mfg. Co.,  
W. E.,  
Columbus, Ohio  
Mayer & Bro. Co., F., Peoria, Ill.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.  
Mueller Furnace Co., L. J.,  
Milwaukee, Wis.  
Robinson Furnace Co.,  
Chicago, Ill.  
Rock Island Register Co.,  
Rock Island, Ill.  
Standard Furnace & Supply Co.,  
Omaha, Neb.  
Stearns Register Co.,  
Detroit, Mich.  
Tuttle & Bailey Mfg. Co.,  
Chicago, Ill.  
Walworth Run Fdy. Co.,  
Cleveland, Ohio

**Registers—Wood.**  
American Wood Register Co.,  
Plymouth, Ind.  
Chicago Furnace Supply Co.,  
Chicago, Ill.  
Eaglesfield Ventilator Co.,  
Indianapolis, Ind.

**Repairs—Stove and Furnace.**  
Hessler Co., H. E.,  
Syracuse, N. Y.  
Northwestern Stove Repair Co.,  
Chicago, Ill.

**Ridging.**  
American Rolling Mill Co.,  
Middletown, Ohio  
David Lupton's Sons Co.,  
Philadelphia, Pa.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.

**Rivets—Stove.**  
The Kirk-Latty Co.,  
Cleveland, Ohio

**Roasters.**  
Lalanc & Grosjean Mfg. Co.,  
Chicago, Ill.

**Rods—Stove.**  
The Kirk-Latty Co.,  
Cleveland, Ohio

**Rolls—Forming.**  
Bertsch & Co.,  
Cambridge City, Ind.

**Roofing Cement.**  
Connors Paint Mfg. Co., Wm.,  
Troy, N. Y.  
Pecora Paint Co.,  
Philadelphia, Pa.

**Roof—Flashing.**  
Hessler Co., H. E., Syracuse, N. Y.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.

**Roofing—Iron and Steel.**  
American Roofing Mill Co.,  
Middletown, Ohio  
Cortright Metal Roofing Co.,  
Philadelphia, Pa.  
Friedley-Voshardt Co.,  
Chicago, Ill.  
Granite City Steel Works,  
Granite City, Ill.  
Inland Steel Co.,  
Chicago, Ill.  
Merchant & Evans Co.,  
Philadelphia, Pa.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.  
National Enameling and Stamping Co.,  
Granite City, Ill.  
Osborn Co., The J. M. & L. A.,  
Cleveland, Ohio  
Wheeling Corrugating Co.,  
Wheeling, W. Va.

**Roofing—Tin.**  
Taylor Co., N. & G.,  
Philadelphia, Pa.  
Wheeling Corrugating Co.,  
Wheeling, W. Va.

**Roofing—Zinc.**  
New Jersey Zinc Sales Co., The,  
New York, N. Y.

**Rubbish Burners.**  
Hart & Cooley Co.,  
New Britain, Conn.

**Salt—Ammoniac.**  
Special Chemicals Co.,  
Waukegan, Ill.

**Schools—Sheet Metal Pattern Drafting.**  
St. Louis Technical Institute,  
St. Louis, Mo.

**Screws—Sheet Metal.**  
Parker-Kalon Corp.,  
New York, N. Y.

**Screens—Perforated Metal.**  
Harrington & King Perforating Co.,  
Chicago

**Shears—Hand and Power.**  
Double-Duty Mfg. Co.,  
Aurora, Ill.  
Marshalltown Mfg. Co.,  
Marshalltown, Iowa  
Peck, Stow & Wilcox Co.,  
Southington, Conn.  
Unishear Co., The,  
New York  
Viking Shear Co.,  
Erie, Pa.

**Sheets—Black and Galvanized.**  
American Rolling Mill Co.,  
Middletown, Ohio  
Davis Co., Inc., C. S., Chicago, Ill.  
Granite City Steel Works,  
Granite City, Ill.  
Merchant & Evans Co.,  
Philadelphia, Pa.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.  
National Enameling and Stamping Co.,  
Granite City, Ill.  
Osborn Co., The J. M. & L. A.,  
Cleveland, Ohio  
Taylor Co., N. & G.,  
Philadelphia, Pa.  
Wheeling Corrugating Co.,  
Wheeling, W. Va.

**Sheets—Iron.**  
American Rolling Mill Co.,  
Middletown, Ohio  
Merchant & Evans Co.,  
Philadelphia, Pa.

**Sheets—Tin.**  
Davis Co., Inc., C. S., Chicago, Ill.  
Granite City Steel Works,  
Granite City, Ill.  
Merchant & Evans Co.,  
Philadelphia, Pa.  
National Enameling and Stamping Co.,  
Granite City, Ill.  
Taylor Co., N. & G.,  
Philadelphia, Pa.

**Sheets—Zinc.**  
New Jersey Zinc Sales Co., The,  
New York, N. Y.

**Shields—Register.**  
Beh & Co.,  
New York, N. Y.  
Shingles and Tiles—Metal.  
Cortright Metal Roofing Co.,  
Philadelphia, Pa.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.  
Wheeling Corrugating Co.,  
Wheeling, W. Va.

**Shingles—Asphalt.**  
Sall Mountain Co.,  
Chicago, Ill.

**Shingles—Zinc.**  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.

**Sifters—Ash.**  
Diener Mfg. Co., G. W.,  
Chicago, Ill.

**Sky Lights.**  
David Lupton's Sons Co.,  
Philadelphia, Pa.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.

**Snips.**  
Peck, Stow & Wilcox Co.,  
Southington, Conn.

**Solder.**  
Chicago Solder Co.,  
Chicago, Ill.  
Double-Duty Elbow Co.,  
Aurora, Ill.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.

**Solder—Aluminum.**  
Ziener Aluminum Solder Co.,  
Rockford, Ill.

**Soldering Furnaces.**  
Berns Co., Otto,  
Newark, N. J.  
Burgess Soldering Furnace Co.,  
Columbus, Ohio  
Clayton & Lambert Mfg. Co.,  
Detroit, Mich.  
Diener Mfg. Co., G. W.,  
Chicago, Ill.  
Double Blast Mfg. Co.,  
North Chicago, Ill.  
Quick Meal Stove Co.,  
St. Louis, Mo.

**Soldering Supplies.**  
Double-Duty Elbow Co., Aurora, Ill.  
Special Chemicals Co.,  
Waukegan, Ill.

**Specialties—Hardware.**  
Diener Mfg. Co., G. W.,  
Chicago, Ill.  
Hessler Co., H. E., Syracuse, N. Y.

**Stairs—Hard Iron Cleaning.**  
Fanner Mfg. Co.,  
Cleveland, Ohio

**Statory.**  
Friedley-Voshardt Co.,  
Chicago, Ill.

**Stove Pipe Reducers.**  
Geroch Bros. Mfg. Co.,  
St. Louis, Mo.

**Stampings—Metal.**  
American Tube & Stamping Co.,  
Bridgeport, Conn.  
Dunning, Inc.,  
Milwaukee, Wis.

**Stearns Register Co.**  
Detroit, Mich.

**Stove Pipe Reducers.**  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.

**Stoves—Camp.**  
Quick Meal Stove Co.,  
St. Louis, Mo.

**Stoves—Gasoline and Oil.**  
Quick Meal Stove Co.,  
St. Louis, Mo.

**Stoves and Ranges.**  
Gray & Dudley Co.,  
Nashville, Tenn.

**Stoves and Ranges.**  
Oakland Foundry Co.,  
Belleville, Ill.

**Stoves and Ranges.**  
Peninsular Stove Co.,  
Detroit, Mich.  
Quick Meal Stove Co.,  
St. Louis, Mo.  
Thatcher Co.,  
Newark, N. J.  
Tacks, Staples, Spikes,  
American Steel & Wire Co.,  
Chicago, Ill.  
The Cement—Elastic,  
Pecora Paint Co.,  
Philadelphia, Pa.

**Tinplate.**  
Davis Co., Inc., C. S., Chicago, Ill.  
Granite City Steel Works,  
Granite City, Ill.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.  
National Enameling and Stamping Co.,  
Granite City, Ill.  
Osborn Co., The J. M. & L. A.,  
Cleveland, Ohio  
Taylor Co., N. & G.,  
Philadelphia, Pa.

**Tools—TinSmith's.**  
Bertsch & Co.,  
Cambridge City, Ind.  
Chicago Elbow Machine Co.,  
Oak Park, Ill.  
Double-Duty Mfg. Co.,  
Aurora, Ill.  
Dreis & Krump Mfg. Co.,  
Chicago, Ill.  
Marshalltown Mfg. Co.,  
Marshalltown, Iowa  
Osborn Co., The J. M. & L. A.,  
Cleveland, Ohio  
Peck, Stow & Wilcox Co.,  
Southington, Conn.  
Unishear Co., The, New York, N. Y.  
Viking Shear Co.,  
Erie, Pa.  
Whitney Mfg. Co., W. A.,  
Rockford, Ill.  
Whitney Metal Tool Co.,  
Rockford, Ill.

**Torches.**  
Berns Co., Otto,  
Newark, N. J.  
Burgess Soldering Furnace Co.,  
Columbus, Ohio  
Clayton & Lambert Mfg. Co.,  
Detroit, Mich.  
Diener Mfg. Co., G. W.,  
Chicago, Ill.  
Double Blast Mfg. Co.,  
North Chicago, Ill.  
Quick Meal Stove Co.,  
St. Louis, Mo.

**Trade Extension.**  
Copper & Brass Research Association,  
New York, N. Y.  
Sheet Steel Trade Extension Committee,  
Pittsburgh, Pa.

**Transit Companies.**  
Cleveland & Buffalo Transit Co.,  
Cleveland, Ohio

**Trimming—Stove.**  
Fanner Mfg. Co.,  
Cleveland, Ohio.

**Ventilators.**  
Arex Company,  
Chicago, Ill.  
Aeolus Dickinson Co.,  
Chicago, Ill.  
Berger Bros. Co.,  
Philadelphia, Pa.  
Friedley-Voshardt Co.,  
Chicago, Ill.  
David Lupton's Sons Co.,  
Philadelphia, Pa.  
Kornacker Co.,  
Chicago, Ill.  
Milwaukee Corrugating Co.,  
Milwaukee, Wis.  
Royal Ventilator Co.,  
Philadelphia, Pa.  
Standard Ventilator Co.,  
Louisburg, Pa.  
Sturtevant Co.,  
Boston, Mass.

**Ventilators—Ceiling.**  
Eaglesfield Ventilator Co.,  
Indianapolis, Ind.  
Hart & Cooley Co.,  
New Britain, Conn.  
Henry Furnace & Fdy. Co.,  
Cleveland, Ohio  
Independent Register & Mfg. Co.,  
Cleveland, Ohio  
Tuttle & Bailey Mfg. Co.,  
New York  
Sturtevant Co., B. F., Boston, Mass.

**Windows—Steel.**  
David Lupton's Sons Co.,  
Philadelphia, Pa.

**Wire—Electrical.**  
American Steel & Wire Co.,  
Chicago, Ill.

**Wire Hoops.**  
American Steel & Wire Co.,  
Chicago, Ill.

**Wire Rope.**  
American Steel & Wire Co.,  
Chicago, Ill.

**Wrenches.**  
Coss Wrench Co.,  
Worcester, Mass.

**Zinc.**  
Marchant & Evans Co.,  
Philadelphia, Pa.  
New Jersey Zinc Co., The,  
New York, N. Y.

Mention AMERICAN ARTISAN in your reply—Thank you!



## WANTS AND SALES

Any yearly subscriber to AMERICAN ARTISAN may insert advertisements of not more than fifty words in our Want and Sales Columns WITHOUT CHARGE.

Such advertisements, however, must be limited to help or situation wanted, tools or equipment for sale, to exchange or to buy, business for sale or location desired.

## BUSINESS CHANCES

**LIGHTNING RODS**—Dealers who are selling Lightning Protection will make money by writing us for our latest Factory to Dealer Prices. We employ no salesmen and save you all overhead charges. Our Pure Copper Cable is endorsed by the Mutual Insurance Companies and hundreds of reliable dealers. Write today for samples and prices. L. K. DIDDIE CO., Marshfield, Wis.

**For Sale**—Sheet metal roofing and furnace business. Well established and with first-class reputation. A good stock of tools, 18-ft. steel brake, 1-30 inch forming roll; 1 turning machine, 1 wire, burring and beading machines, all stakes; 1 No. 2 Hercules shear, 1 Whitney punch, all in first-class condition; 1 new 1-ton Ford truck, 40-ft. new ladders, good condition, also furnace squaring shears, stock shears and all tools necessary; all for \$2,500. Located in the Missouri Ozarks. Do not answer unless you have \$1,500 cash. Address X-79, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 18-3t

**For Sale**—On account of death, forced to sell prosperous sheet metal and furnace business in large city close to Chicago. Shop fully equipped and doing business with established contractor and home trade. Only reliable parties considered. Very enticing proposition for a good going business. Act quickly. Address X-81, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 18-3t

**For sale**—Sheet Metal Business including Raised Double Bungalow building, five rooms, bath room, two toilets each side, two metal garages, two driveways, paved basement. Building four years old and is in first class condition. Located in Dixie. \$15,000. Cash or terms. A bargain at this figure. Address X-85, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 30-3t

**For Sale**—Sheet metal, furnace, fender and radiator shop in central Indiana city of 7,000 population. Only two tin shops in town. Good trade and reputation. Many small towns around. Plenty of tools and stock. Big shop. \$500 takes all. Address X-74, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 16-3t

**For Sale**—Sheet metal business established 10 years in city of 40,000 near Chicago. Inventory value of stock and tools \$6,000. but can be bought at a very favorable figure. Must be sold at once. Act now. Address X-84, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 20-3t

**For Sale**—One of the best paying plumbing, heating, and sheet metal businesses in eastern Iowa. Lots of work ahead. Fifteen percent discount for cash for a quick sale. Reason for selling account of health. Address X-73, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 16-3t

**Wanted**—To buy small furnace and sheet metal shop in Iowa or surrounding states. Address X-77, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 18-3t

## HELP WANTED

**Wanted**—A first class foreman, experienced in all branches of sheet metal work in light and heavy materials, must be able to read blue prints, lay out accurately, steady and non drinking. This is a steady job in a Pennsylvania town where the best of conditions exist. State age, ability, wages expected, etc., in first letter and receive particulars by addressing X-82, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 19-3t

**Wanted**—A first class sheet metal man. One who is familiar with estimating and furnace work. To take complete charge of a well equipped shop. Prefer to have man run same on percentage basis or buy part interest. Married man preferred. Write to Williams & Sons, 222 East Hughitt Street, Iron Mountain, Michigan. 19-3t

**Wanted**—First class sheet metal worker. Must be well experienced in mar- quise, skylight and electric sign work and must be layout man. I am willing to pay \$1.50 per hour to a man above the average who can turn out the work. Address Stuart Metal Works, Box 673, Stuart, Florida. 19-3t

**Wanted**—A married man not over 40 years of age with family, in a live southern town of 18,000 population. Steady position for right man. Must be first class sheet metal worker, able to lay out work and design general sheet metal work. Read Genesis 37-17. Address Dawsey Sheet Metal Works, Dothan, Ala. 16-3t

**Wanted**—Sheet metal layer out, for boat work, stacks, bruckings, uptakes, tanks, ventilating ducts, etc. No. 8 plate and lighter. Must be able to read blue prints. Steady job. State experience and wages wanted. Address J. P. Kohnen, 87 Pine Street, River Rouge, Michigan. 20-3t

**Wanted**—Side line on commission. Salesmen for a complete line of furnace fans and boosters. Will also send catalogs to furnace salesmen and those in the trade. Address Heating Systems & Supply Co., 107 W. Van Buren St., Chicago, Illinois. 18-3t

**For Sale**—Established fully equipped tin shop in Fort Arthur, Texas. Population 40,000. Retiring on account of old age. Opportunity for a hustler. Must sell at great sacrifice for cash. Address P. A. Wutke, 1712 5th Street, Fort Arthur. 18-3t

**Wanted**—A good, reliable sheet metal worker for both inside and outside work in a job shop. Wages \$1.00 per hour. Address X-80, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 18-3t

**Wanted**—First class furnace salesman. Fine opportunity for man wishing to come to Colorado. Michael Heating Co., 414 W. Colfax, Denver, Colorado. 17-3t

**Wanted**—Sheet metal workers. Union shop. Ten dollars per eight hours. West Side Sheet Metal Works, Scranton, Pennsylvania. 16-3t

## SITUATION WANTED

**Situation Wanted**—By conscientious married man with 15 years' experience in ventilation and warm air furnace selling experience. Now employed as traveling salesman in Wisconsin for furnaces. Will be open for position on January 1. Can hold present position. Address X-72, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 15-3t

**Situation Wanted**—By first class warm air heating, ventilating, blow pipe and dust collecting man; 23 years' experience; married and sober. Wants steady position. State wages, etc., in first letter. Illinois or Wisconsin preferred. Address B. J. Hawkins, 425 North 4th street, Iron River, Michigan. 16-3t

**Situation Wanted**—By first class warm air heating man. Understands the furnace code and installation work. Have had about 9 years' experience. Am 25 years of age. Want steady work with reliable firm. Address 3824 43rd Avenue, So. Minneapolis, Minnesota. 19-3t

**Situation Wanted**—Must be steady position. Inside work. Would buy interest and run shop on shares. Illinois preferred. Address X-75, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-3t

## SITUATION WANTED

**Situation Wanted**—Tinner, plumber and furnace man wishes a steady position the year around. Will consider buying a working interest in a good tin and plumbing business. Have had 25 years' experience. Honest and willing worker. Can furnish first-class references. Address X-86, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 20-3t

**Situation Wanted**—By first class tinner and furnace man. Can do inside and outside work. 25 years at the trade. Nothing but steady job the year around. Am married. Can do anything that comes in any tin shop. Address W. J. Mack, 87 East Main Street, Saint Charles, Illinois. 16-3t

**Situation Wanted**—By first-class sheet metal worker and furnace installer. Want situation in Iowa, Minnesota or Nebraska. Can do anything that comes in a tin shop. Address X-78, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 18-3t

**Situation Wanted**—By first class heating and ventilating man with good reliable firm. 12 years' experience. Can layout and erect own work. Address X-76, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 17-3t

**Situation Wanted**—Furnace salesman and heating engineer of extraordinary ability to promote business, available now or December first. Address X-70, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 15-3t

## TINNERS' TOOLS

**For Sale**—Almost new set of tools. Following is part of list, balance may be had for the asking: Crimper and beader, rotary machine, following stakes, hollow mandrel, conductor, square, tinner's furnace, gutter tongs, one set of hollow punchers, one folder, one roller, etc. Address Geo. J. Gag, 315 North Minnesota Street, New Ulm, Minnesota. 20-3t

**For Sale**—1 1/2 ft. Robinson brake, 1 3/4" Niagara square shear, both in good condition, and for sale at a bargain. Address L. J. Brien, Lock Box No. 104, Hart, Michigan. 17-3t

**Wanted**—To buy a Chicago Steel or Robinson brake, 8 or 10 ft.; also tinner's tools. Address W. H. Redmond, Auburn, Nebraska. 18-3t

## BOOKS

**Sheet Metal Duct Construction**, by Neubecker—A treatise on the construction and erection of heating and ventilating ducts, including the cutting and forming of the metal, the laying out of the elbows, etc. A practical expert wrote this book and you'll find that it covers the subject thoroughly. By William Neubecker. Bound in cloth, 194 pages, 217 illustrations. Size 5 1/2 x 8 1/4 inches. Price \$2.00. Order from Book Dept., AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.

**Kinks and Labor Savings Methods for Sheet Metal Workers**, Vols. 1 and 2—Volume I. There are hundreds of ideas and expedients, all contributed by sheet metal workers throughout the country, illustrated by cuts and original drawings. Cloth bound. Size 4 1/2 x 7 inches. Price \$1.00. Volume II written in same popular style as Volume I. Places at your disposal a comprehensive collection of ingenious ways of executing many practical tasks in much more simple way than if done in the regulation manner. Also contains special articles on Automobile Repairing; gives a very practical series of illustrated directions on erecting metal ceilings with ten guide rules which will save time, trouble and expensive mistakes. Price \$1.00. Order from Book Dept., AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.



## BOOKS

Manual of Automotive Radiator Construction and Repair, by F. L. Curfman and T. H. Leet—Anyone interested in Radiator Repairing will find the 185 pages of practical instructions and the 130 illustrations showing actual construction and repairing a big help. In a condensed manner some four to five thousand answers to questions are given. It is thoroughly practical as both authors are men of wide experience in this work. Printed in large, easy to read type. Measures 5 1/2 x 9 inches. Price \$2.50. Order from Book Dept., AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.

The Ventilation Handbook, by Charles L. Hubbard. A practical book designed to cover the principles and practice of ventilation as applied to furnace heating; ducts, flues and dampers for gravity heating; fans and fan work for ventilation and hot blast heating by means of a comprehensive series of questions, answers and very plain descriptions easy to understand. Price \$2.00. Order from Book Dept., AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.

## SPECIAL NOTICES

**The Rate for Special Notices**  
— displayed want ads —  
**\$3.00 per inch per insertion.**

## PATENTS

HUBERT E. PECK  
Patent Attorney

Barrister Bldg., WASHINGTON, D. C.

## A FEW MEN

with practical furnace selling experience needed to cover 3 or 4 desirable sales territories, with complete heating line.

Only high grade men will be considered.

Territories must be assigned by early December. Write promptly and in confidence.

L. J. Mueller Furnace Co.,  
Milwaukee, Wisconsin

19-1f

## SITUATION WANTED

A strictly first class retail furnace salesman. Now employed, wants to make change. Fully capable of taking charge of furnace department. Prefer the east. Not a cheap man, but earn my salary. Can change on three weeks' notice. Address L-87, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.

19-3t

## FURNACE SALESMAN

We want a general salesman with a thorough knowledge of cast furnace trade, but who prefers to sell a steel furnace. Must be a volume getter. Write, giving connections for past five years, age, nationality and references. The Lennox Furnace Co., Marshalltown, Iowa.

19-2t.

## SPECIAL NOTICES

FURNACE SALESMEN  
WANTED

Further expansion of our business in the Eastern States in 1927 will require the services of two or three more salesmen. They must be competent warm air heating men, understand the Standard Code and have ability to produce business. Exceptional opportunity for some real business-getters.

The Lennox Furnace Co.,  
Syracuse, New York 17-4t

## FURNACE SALESMEN

Experienced retail furnace salesmen and furnace installers; splendid proposition for resourceful, energetic men of good character and habits; excellent opportunity to get established in business with a specialty that insures attractive profits; young man, financially responsible preferred, although good moral risks will be interviewed; only those with successful records need apply. Address L-88, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.

19-3t

## WANTED

Manufacturer of well known trade mark line of boilers and furnaces requires additional high class representatives for the following territories in order to carry out contemplated 1927 selling campaign: Northern Indiana, Central Illinois, Northern Illinois and Southern Wisconsin. Applicants requested to send complete information covering age, experience, salary expected, etc., in first communication as negotiations can then be started immediately. Address L-89, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.

20-4t

## SALESMEN WANTED

Have very good territory openings including such states as: Illinois, Kentucky, Tennessee and others, on a complete line of furnaces which sell at popular prices. This line of furnaces embodies all of the practical and worthwhile features of modern furnace construction. If you know how to lay out furnace jobs, and can produce and develop business, we have an attractive proposition for you. Address L-86, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.

19-2t.

## SPECIAL NOTICES

## WANTED

High Class Stove Salesman for  
Pennsylvania Territory

Man wanted must be familiar with Pennsylvania trade and have had a successful record in that territory. We have established trade and will give the right man an opportunity of making real money on salary and commission basis. All inquiries treated confidentially. FULLER & WAREN CO., Troy, New York. 15-1f

## FOR SALE

In Hartford, Conn., sheet metal business (established 1908) manufacturing blower systems, ventilating systems, dust collecting systems, roof ventilators and general sheet metal work of every description. Complete equipment of patterns, power and hand machines and tools, manufactured stock, office equipment and supplies, drafting room equipment and supplies, etc. Prospective orders will pay for it in short time. Owner retiring. Opportunity of a lifetime. For full particulars, address C. H. Keeney, P. O. Box 292, Unionville, Conn. 17-3t

## CLEAN LIVING ROOMS

When sections of WARM AIR FURNACES are double-sealed with INSA-LUTE (liquid porcelain). Painting it over leaky places makes old furnaces clean as new. Eliminates resetting of furnace. Order 8-lb. (half gallon) can at \$2.00—if unsatisfactory—you need not pay for it. If your jobber cannot supply you—order direct.

Technical Products Co. Pittsburgh, Pa.



Are You looking  
for more sales?

WARM Air Furnace  
and Furnace Supply Manufacturers who are desirous of securing high grade sales managers and worth while traveling men will find that a Special Notice advertisement in these columns will produce results.

AMERICAN ARTISAN

has put many a good man in touch with progressive manufacturers.

This is the best personnel market page in the field—use it.

November 13, 1926

AMERICAN ARTISAN

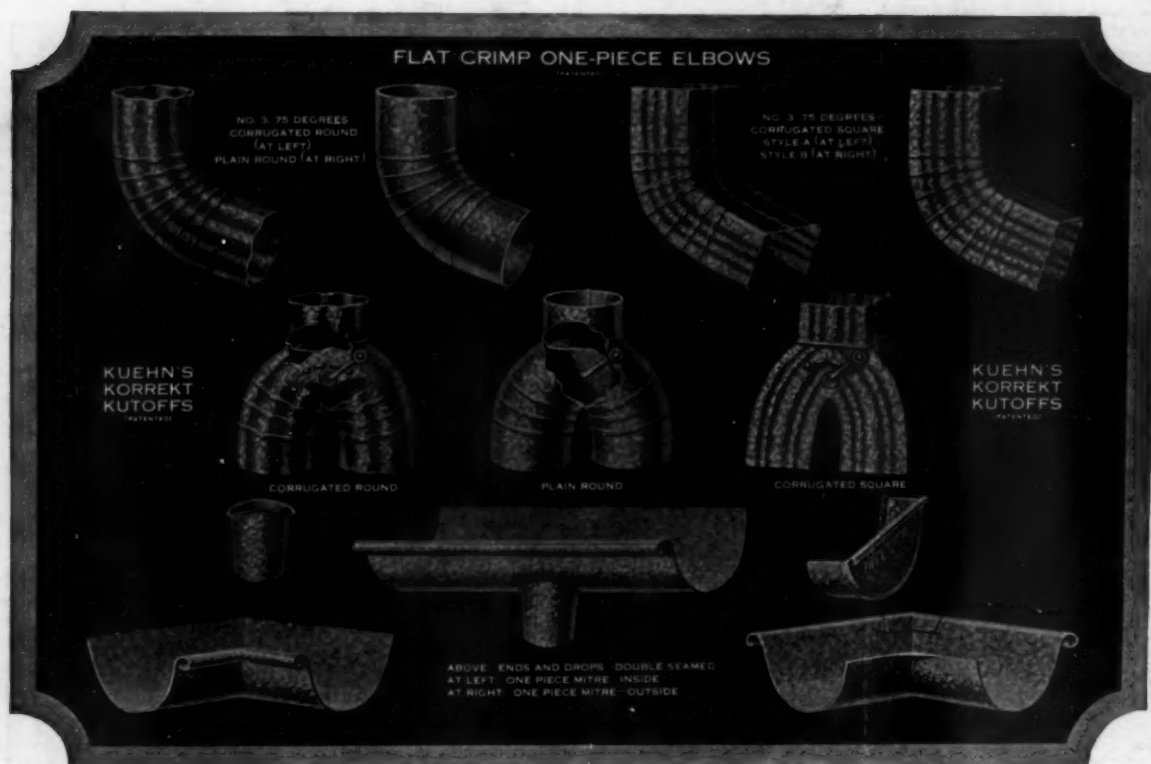


**JOIN!**

AMERICAN  
RED CROSS

*Serves Humanity*

LAURENCE WILSON



## Treat Your Trade to Super-Quality

UNIFORMLY dependable quality—practical, patented designs and features not found in any other line—backed by the progressive Milcor organization policy for keeping equipment and facilities ahead of demand so as to insure speedy service always; these are the circumstances quite largely responsible for the extensive use of Milcor Products.

But the good judgment of the Building Trades and the Public has also been a most important factor in making

the Milcor Line so popular. Sheet metal men who are determined to serve their customers' interests best, always insist on Milcor—and preferably, Milcor Products made from pure Copper, or from the famous rust-resisting ARMCO Ingot Iron.

Milcor Products are made in Steel; "Coppered Metal"; "Wild-er Metal"; Zinc; Copper; and pure, rust-resisting



The Milcor Line of Eaves Trough, Conductor Pipe and Trimmings, Roofing, etc., is complete in every detail and meets every requirement for efficiency in erection. Treat your Trade to Milcor super-quality. It's a habit that pays!

MILWAUKEE CORRUGATING COMPANY, MILWAUKEE, WIS.  
CHICAGO, ILL. KANSAS CITY, MO. LA CROSSE, WIS.

# MILCOR

## SUPER-QUALITY SHEET METAL PRODUCTS